

authority of the Commission in the State under chapters 6, 7, and 8, and section 161 of the Act with respect to the following materials:

- A. Byproduct materials as defined in section 11e.(1) of the Act;
- B. Source materials; and
- C. Special nuclear materials in quantities not sufficient to form a critical mass.

Article II

This Agreement does not provide for discontinuance of any authority and the Commission shall retain authority and responsibility with respect to regulation of:

- A. The construction and operation of any production or utilization facility;
- B. The export from or import into the United States of byproduct, source, or special nuclear material, or of any production or utilization facility;
- C. The disposal into the ocean or sea of byproduct, source, or special nuclear waste materials as defined in regulations or orders of the Commission;
- D. The disposal of such other byproduct, source, or special nuclear material as the Commission from time to time determines by regulation or order should, because of the hazards or potential hazards thereof, not be so disposed of without a license from the Commission;
- E. The land disposal of source, byproduct and special nuclear material received from other persons; and
- F. The extraction or concentration of source material from source material ore and the management and disposal of the resulting byproduct material.

Article III

This Agreement may be amended, upon application by the State and approval by the Commission, to include the additional area(s) specified in article II, paragraph E or F, whereby the State can exert regulatory control over the materials stated herein.

Article IV

Notwithstanding this Agreement, the Commission may from time to time by rule, regulation, or order, require that the manufacturer, processor, or producer of any equipment, device, commodity, or other product containing source, byproduct, or special nuclear material shall not transfer possession or control of such product except pursuant to a license or an exemption from licensing issued by the Commission.

Article V

This Agreement shall not affect the authority of the Commission under subsection 161 b. or i. of the Act to issue rules, regulations, or orders to protect the common defense and security, to protect restricted data or to guard against the loss or diversion of special nuclear material.

Article VI

The Commission will use its best efforts to cooperate with the State and other Agreement States in the formulation of standards and regulatory programs of the State and the Commission for protection against hazards of radiation and to assure that State and Commission programs for protection against hazards of radiation will be coordinated and compatible. The State will use its best efforts to cooperate with the Commission and other Agreement States in the formulation of standards and regulatory programs of the State and the Commission for protection against hazards of radiation and to assure that the State's program will continue to be compatible with the program of the Commission for the regulation of like materials. The State and the Commission will use their best efforts to keep each other informed of proposed changes in their respective rules and regulations and licensing, inspection and enforcement policies and criteria, and to obtain the comments and assistance of the other party thereon.

Article VII

The Commission and the State agree that it is desirable to provide reciprocal recognition of licenses for the materials listed in article I licensed by the other party or by any Agreement State. Accordingly, the Commission and the State agree to use their best efforts to develop appropriate rules, regulations, and procedures by which such reciprocity will be accorded.

Article VIII

The Commission, upon its own initiative after reasonable notice and opportunity for hearing to the State, or upon request of the Governor of the State, may terminate or suspend all or part of this Agreement and reassert the licensing and regulatory authority vested in it under the Act if the Commission finds that (1) such termination or suspension is required to protect the public health and safety, or (2) the State has not complied with one or more of the requirements of section 274 of the Act. The Commission may also, pursuant to section 274j of the Act, temporarily suspend all or part of this Agreement if, in the judgment of the

Commission, an emergency situation exists requiring immediate action to protect public health and safety and the State has failed to take necessary steps. The Commission shall periodically review this Agreement and actions taken by the State under this Agreement to ensure compliance with section 274 of the Act.

Article IX

This Agreement shall become effective on April 1, 1992, and shall remain in effect unless and until such time as it is terminated pursuant to article VIII.

Done at Rockville, Maryland in triplicate, this 16th day of March, 1992.

For the United States Nuclear Regulatory Commission, Ivan Selin, Chairman.

Done at Augusta, Maine, in triplicate, this 25th day of March, 1992.

For the State of Maine, John R. McKernan, Jr., Governor.

Dated at Rockville, this 9th day of April, 1992.

For the United States Nuclear Regulatory Commission,

Sheldon A. Schwartz,

Deputy Director, Office of State Programs.

[FR Doc. 92-8839 Filed 4-15-92; 8:45 am]

BILLING CODE 7590-01-M

Action Plan to Ensure Timely Cleanup of Site Decommissioning Management Plan Sites

AGENCY: Nuclear Regulatory Commission.

ACTION: Notice of availability of NRC action plan.

SUMMARY: The NRC has developed an Action Plan to describe the approach the agency will use to accelerate the cleanup of radiologically contaminated sites listed in NRC's Site Decommissioning Management Plan (SDMP). The objective of this plan is to communicate the Commission's general expectation that sites listed in the SDMP be cleaned up in a timely and effective manner. This plan (1) identifies existing criteria to guide cleanup of contaminated soils, structures, and equipment and emphasizes site-specific application of the As Low As Reasonably Achievable (ALARA) principle; (2) states the NRC's position on the finality of decommissioning decisions; (3) describes the NRC's general expectation that SDMP site cleanup will be completed within a 4-year timeframe after operations cease or 3 years after the issuance of an initial cleanup order; (4) identifies currently available guidance on site

characterization work in support of decommissioning; and (5) describes the process the NRC staff will use to establish and enforce schedules for timely cleanup on a site-specific basis.

ADDRESSES: Other documents referenced in this notice may be reviewed and/or copies for a fee from the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC 20555.

FOR FURTHER INFORMATION CONTACT: John A. Austin, Chief, Decommissioning and Regulatory Issues Branch, Division of Low-Level Waste Management and Decommissioning, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 504-2560.

SUPPLEMENTARY INFORMATION:

I. Introduction and Purpose

Over the past several years, the Nuclear Regulatory Commission (NRC) has identified over 40 nuclear material sites that warrant special attention by the Commission. These sites have buildings, former waste disposal areas, large piles of tailings, groundwater, and soil contaminated with low levels of uranium or thorium (source material) or other radionuclides. Consequently, they present varying degrees of radiological hazard, cleanup complexity, and cost. Some of the sites are still under the control of active NRC licenses, whereas licenses for other sites may have already been terminated or may have never been issued. At some sites, licenses are financially and technically capable of completing cleanup in a reasonable timeframe, whereas at other sites, the licensee or responsible party is unable or unwilling to perform cleanup. In addition, the sites are currently in various stages of decommissioning. At some sites, licensees have initiated decommissioning, whereas at other sites, decommissioning has not yet been planned or initiated.

The NRC believes that the best approach for minimizing the potential for unnecessary radiation exposures and environmental contamination in the future is to ensure that these sites are cleaned up in a timely and effective manner. In 1990, the NRC implemented the Site Decommissioning Management Plan (SDMP) to identify and resolve issues associated with the timely cleanup of these sites. The SDMP provides a comprehensive strategy for NRC and licensee activities dealing with the cleanup and closure of contaminated nuclear material facilities over which the NRC has jurisdiction. The appendix to this document lists the sites that are

currently included in the SDMP (the SDMP does not include more routine decommissioning cases such as nuclear power reactors). The SDMP has been effective in ensuring coordination and resolution of some of the policy and regulatory issues affecting site decommissioning. Progress on actual site remediation, however, continues to be slow. The limited progress to date has prompted the Commission to direct the NRC staff to initiate actions to accelerate the cleanup of SDMP sites.

It should be noted that this Action Plan itself does not contain enforceable standards and is not intended to create new rights or obligations on third parties or to preclude litigation of properly framed issues in any pending proceeding. Implementation of this plan may result in the establishment of legally binding requirements by order or license amendment that may be enforced on a site-specific basis. However, nothing in this Action Plan is intended to affect hearing rights associated with such orders or licensee amendments or the hearing rights of parties to presently pending adjudications and, to the extent that rules promulgated in accord with 5 U.S.C. 553 are not applicable, each case will be judged on its own merits.

II. Action Plan

In accordance with the overall objective of ensuring timely and effective cleanup of SDMP sites, the NRC staff will review site-specific plans and take decommissioning actions consistent with the following elements:

A. Cleanup Criteria

Pending NRC rulemaking on generic radiological criteria for decommissioning, the NRC will continue to consider existing guidance, criteria, and practices listed below to determine whether sites have been sufficiently decontaminated so that they may be released for unrestricted use, pursuant to, or consistent with, the decommissioning rules in 10 CFR 30.36, 40.42, 50.82, 70.38, and 72.54. These cleanup criteria will be applied on a site-specific basis with emphasis on residual contamination levels that are ALARA.

1. Options 1 and 2 of the Branch Technical Position "Disposal or Onsite Storage of Thorium or Uranium Wastes from Past Operations" (48 FR 52601; October 23, 1981).

2. "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," Policy and Guidance Directive FC 83-23,

Division of Industrial and Medical Nuclear Safety, November 4, 1983.

3. "Termination of Operating Licenses for Nuclear Reactors," Regulatory Guide 1.88, June 1974, Table 1, for surface contamination of reactor facility structures. Also Cobalt-60, Cesium-137, and Europium-152 that may exist in concrete, components, and structures should be removed so the indoor exposure rate is less than 5 microrentgen per hour above natural background at 1 meter, with an overall dose objective of 10 millirem per year (cf. Letter to Stanford University from James R. Miller, Chief, Standardization and Special Projects Branch, Division of Licensing, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, April 21, 1982, Docket No. 50-141).

4. The Environmental Protection Agency's (EPA's) "Interim Primary Drinking Water Regulations," 40 CFR part 141 (41 FR 38404; July 9, 1976). In accordance with FC 83-23, the maximum contaminant levels for radionuclides in public drinking water as established by the EPA should be used as reference standard for protection of groundwater and surface water resources.

5. The EPA's "Persons Exposed To Transuranium Elements In The Environment" (42 FR 60958; November 30, 1977). This document provides guidelines for acceptable levels of transuranium elements in soil.

The criteria of this section will be considered in establishing site-specific ALARA levels for each of the SDMP sites in license amendments and orders.

B. Finality

The NRC's decision to terminate a license will relieve the licensee from any further obligation to the NRC to conduct additional cleanup, as long as the licensee decommissioned the site in full accordance with an approved decommissioning plan. The licensee will demonstrate compliance with the cleanup levels described in the decommissioning plan by performing a radiologic survey of the site prior to license termination. The NRC usually conducts an independent survey to confirm the accuracy of the licensee's termination survey. Therefore, if a licensee or responsible party cleaned up a site, or was in the process of cleaning up a site, under an NRC-approved decommissioning plan, the NRC will not require the licensee to conduct additional cleanup in response to NRC criteria or standard established after NRC approval of the plan. An exception to this case would be in the event that additional contamination, or

noncompliance with the plan, is found indicating a significant threat to public health and safety. Noncompliance would occur with a licensee or responsible party does not comply with an approved decommissioning plan, or provides false information.

The NRC will inform EPA about specific decommissioning actions at sites. NRC will also inform State and local agencies that have jurisdiction over aspects concerning decommissioning actions.

C. Timing

The NRC staff will address the timing of SDMP site cleanups on a case-by-case basis, with the expectation that cleanup generally be completed within about 4 years after operations that caused the contamination cease or 3 years after issuance of an initial cleanup order. To achieve this objective, major decommissioning milestones should be established within the following timeframes:

1. As soon as practical, but generally not later than 12 months after notification by the NRC that decommissioning is expected to commence, the licensee or responsible party identified by the NRC should submit to the NRC an adequate site characterization report, if that has not yet been completed. The NRC encourages early and substantive coordination and communication between the licensee or responsible party in planning for site characterization, including NRC review of site characterization plans.

2. As soon as practical, but generally not later than 6 months after NRC approval of the site characterization report, the licensee or responsible party should submit to the NRC a site decommissioning plan for approval based on the site characterization results. The decommissioning plan should include schedules for completing site decommissioning work in a timely and effective manner, including plans to dispose of contaminated materials either onsite pursuant to 10 CFR 20.302 (or 10 CFR 20.2002 of the revised 10 CFR part 20), or at a licensed disposal facility offsite.

3. As soon as practical, but generally not later than 18 months after NRC approval of the site decommissioning plan, the licensee or responsible party should complete all decommissioning work and termination surveys, so that sites or facilities can be released for unrestricted use after termination of the license, as appropriate.

In implementing this approach, the NRC will establish specific and enforceable milestones for each phase

of decommissioning through license amendments or orders. These schedules will provide flexibility to allow a licensee or responsible party to demonstrate good cause for delaying cleanup based on technical and risk reduction considerations, or for reasons beyond their control. NRC recognizes that at sites containing hazardous chemical wastes, schedules will depend, at least in part, on the necessary reviews and approvals by other responsible agencies (e.g., EPA or State agencies).

D. Site Characterization

Inadequate site characterization has been one of the technical issues that has delayed timely approval and implementation of site-specific decommissioning actions. Therefore, the NRC is developing new guidance on the content of acceptable site characterization programs conducted in support of decommissioning actions. The NRC has developed a draft "Guidance Manual for Conducting Radiological Surveys in Support of License Termination" (NUREG/CR-5849) ¹ through Oak Ridge Associated Universities. This draft manual, which will be published for interim use and evaluation in April 1992, should be consulted regarding general aspects of site characterization activities. In addition, this draft manual should be used by licensees when conducting radiological surveys in support of license terminations in the interim until the manual is finalized. NRC is developing additional guidance on specific aspects of site characterization, such as hydrogeologic assessment of contaminated sites.

Until specific NRC guidance on site characterization is developed, licensees should continue to review relevant information from existing documents on site characterization such as those identified below. Although NRC recognizes that these documents do not completely address site characterization needs for decommissioning, use of these references, in addition to site-specific consultation with the NRC staff, will help ensure that site characterization is appropriately planned and conducted so that final site characterization reports are submitted with minimal deficiencies and in a timely manner. The following documents, available from the NRC Public Document Room, should be

reviewed regarding general aspects of site characterization activities:

1. "Survey Procedures Manual for the ORAU Environmental Survey and Site Assessment Program," Oak Ridge Associated Universities, March 1990.
2. "Laboratory Procedures Manual for the Environmental Survey and Site Assessment Program," Revision 5, Oak Ridge Associated Universities, February 1990.
3. "Quality Assurance Manual for the Oak Ridge Associated Universities' Environmental Survey and Site Assessment Program," Revision 3, Oak Ridge Associated Universities, February 1990.
4. "Monitoring for Compliance With Decommissioning Termination Survey Criteria," NUREG/CR-2082, ² June 1981.
5. "Guidance on the Application of Quality Assurance for Characterizing a Low-Level Radioactive Waste Disposal Site," NUREG-1383, October 1990.

E. Procedures to Compel Timely Cleanup

The NRC staff will seek voluntary cooperation by licensees or other responsible parties in establishing and implementing decommissioning plans in accordance with the objectives of this Action Plan. For sites with active NRC licenses, an approved decommissioning plan that includes appropriate schedules and cleanup levels will be incorporated into the license by amendment through normal licensing procedures. For sites with joint licenses (i.e., facilities that contain both a materials and a non-power reactor license), a coordinated approach under both licenses will be taken in establishing appropriate schedules and plans for decommissioning. If a site is not under an active license, the NRC may impose a decommissioning plan by order.

In cases where voluntary cooperation is ineffective in establishing acceptable schedules for completing decommissioning actions, the NRC will establish legally binding requirements and take enforcement action, as necessary, to compel timely and effective cleanup of SDMP sites. Demands for Information may be used to establish licensee commitments to perform major decommissioning activities. Enforcement actions may

¹ A free single copy of draft NUREG/CR-5849 may be requested by writing to the U.S. Nuclear Regulatory Commission, Attn: Distribution and Mail Services Section, room P-130A, Washington, DC 20555. A copy is also available for inspection and/or copying in the NRC Public Document Room, 2120 L Street, NW, (Lower Level), Washington, DC.

² Copies of NUREGS may be purchased from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20013-7082. Copies are also available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. A copy is also available for inspection and/or copying at the NRC Public Document Room, 2120 L Street, NW, (Lower Level), Washington, DC.

include issuance of orders, including immediately effective orders, to compel actions by licensees or other responsible parties. If necessary, NRC will issue orders requiring payment of funds into a decommissioning escrow account when a licensee or responsible party fails to meet an agreed upon schedule and has not already established an adequate decommissioning fund pursuant to, or consistent with, the decommissioning funding rules (10 CFR 30.35, 40.36, 50.82, 70.25, and 72.36). The amount of the escrow account will be based upon and be consistent with the estimated cost required to complete site cleanup. Other enforcement actions may include escalated payment of funds into the escrow account based on a licensee's or responsible party's failure to comply with the order. Accumulations into that account will be dedicated for use to finance the cleanup of the site. Finally, the NRC will consider issuing civil penalties where (1) the licensee or responsible party fails to comply with an order compelling payment into an escrow account; or (2) the licensee or responsible party fails to comply with a requirement or an order compelling cleanup when there is already sufficient decommissioning funding. Additionally, NRC may seek court injunctions to compel enforcement of these orders.

Dated at Rockville, Maryland, this 10th day of April, 1992.

For the Nuclear Regulatory Commission.

John H. Austin,

Chief, Decommissioning and Regulatory Issues Branch, Division of Low-Level Waste Management and Decommissioning, Office of Nuclear Material Safety and Safeguards.

APPENDIX—EXISTING SDMP SITES

Site name	Location
Advanced Medical Systems	Cleveland, OH.
ALCOA	Cleveland, OH.
AMAX	Wood County, WV.
Aberdeen Proving Ground	Aberdeen, MD.
Army Arsenal	Watertown, MA.
Babcock and Wilcox	Apollo, PA.
Babcock and Wilcox	Parks Township, PA.
BP Chemicals	Lima, OH.
Budd Company	Philadelphia, PA.
Cabot Corporation	Boyerstown, PA.
Cabot Corporation	Reading, PA.
Cabot Corporation	Revere, PA.
Chemtron Corporation (Bert Ave.)	Cleveland, OH.
Chemtron Corporation (Harvard Ave.)	Cleveland, OH.
Chevron Corporation	Pawling, New York.
Dow Chemical	Midland, MI and Bay City, MI.
Elkem Metals	Marbleton, OH.
Englehard	Plainville, MA.
Fansteel	Muskogee, OK.
General Services Administration	Watertown, MA.

APPENDIX—EXISTING SDMP SITES—Continued

Site name	Location
Hartley and Hartley	Bay County, MI.
Heritage Minerals	Lakehurst, NJ.
Kerr-McGee (Cimarron)	Crescent, OK.
Kerr-McGee	Cushing, OK.
Magnesium Elektron	Flemington, NJ.
Molycorp	Washington, PA.
Molycorp	York, PA.
NE Ohio Regional Sewer District	Cuyahoga Heights, OH.
Nuclear Metals	Concord, MA.
Permagrain	Media, PA.
Pesses Chemical	Pulaski, PA.
Remington Arms Company	Independence, MO.
RMI Titanium	Ashtabula, OH.
RTI, Inc.	Rockaway, NJ.
Safety Light Corporation	Bloomsburg, PA.
Schott Glass	Dursey, PA.
Shieldalloy	Cambridge, OH.
Shieldalloy	Newfield, NJ.
Texas Instruments	Attleboro, MA.
United Nuclear Corporation	Wood River, Junction, IL.
Victoreen	Cleveland, OH.
Westinghouse (Waltz Mill)	Madison, PA.
West Lake Landfill	St. Louis, MO.
Whittaker Metals	Greenville, PA.
Wyman-Gordon	North Grafton, MA.
3M Company	Kerrick, MN.

[FR Doc. 92-8838 Filed 4-15-92; 8:45 am]

BILLING CODE 7590-01-M

PENNSYLVANIA AVENUE DEVELOPMENT CORPORATION

Public Information Collection Requirements Submitted to OMB for Review

PADC has submitted (on April 1, 1992) the following public information collection requirement to OMB for review and clearance under the Paperwork Reduction Act of 1980, Pub. L. 96-511 (44 U.S.C. ch. 35). Copies of the submission may be obtained by calling the PADC clearance officer listed. Send comments to the OMB reviewer listed and to the PADC clearance officer.

Pennsylvania Avenue Development Corporation

OMB Number: 3206.

Form Number: No form number available; information requested in the Quarterly Workforce Report for the Federal Triangle Development Project in Washington, DC.

Title: Quarterly Workforce Report.

Description: Under the authority of the Pennsylvania Avenue Development Corporation Act, as amended (Pub. L. 92-578), and PADC's Affirmative Action Policy and Procedure, 36 CFR part 906, PADC has requested the developer of the Federal Triangle site in Washington,

DC to obtain, on a voluntary basis, detailed statistics of racial and ethnic composition of the construction workforce on the project.

Respondents: Construction contractors.

Clearance Officer: Talbot J. Nicholas II, Attorney, (202) 724-9055, PADC, suite 1220 North, 1331 Pennsylvania Avenue, NW., Washington, DC 20004.

OMB Reviewer: Elizabeth Harker, (202) 395-3750, Office of Information and Regulatory Affairs, Office of Management and Budget, New Executive Office Building, 725 17th St., NW., Washington, DC 20503.

Dated: April 10, 1992.

M.J. Brodia,

Executive Director.

[FR Doc. 92-8793 Filed 4-15-92; 8:45 am]

BILLING CODE 7830-01-M

SECURITIES AND EXCHANGE COMMISSION

Forms Under Review by Office of Management and Budget

Agency Clearance Officer—Kenneth Fogash (202) 272-2142.

Upon written request copy available from: Securities and Exchange Commission, Office of Filings, Information and Consumer Services, Washington, DC 20549.

Extension

Rule 206(3)-2—File No. 270-218

Rules 8b-1 through 8b-32—File No. 270-135

Notice is hereby given pursuant to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*) that the Securities and Exchange Commission (Commission) has submitted a request for extension for Rule 206(3)-2 under the Investment Advisers Act of 1940 (17 CFR 275.206(3)-2) and Rules 8b-1 through 8b-32 (17 CFR 270.8b-1 to 270.8b-32), a family of rules under section 8(b) of the Investment Company Act of 1940.

Rule 206(3)-2 permits registered investment advisers to comply with section 206(3) of the Investment Advisers Act of 1940 by obtaining a blanket consent from a client to enter into agency cross transactions, provided certain disclosure is made to the client. Approximately 100 respondents utilize the rule annually, necessitating about 122 responses each year, for a total of 12,200 responses. Each response requires about .5 hours, for a total of 6,100 hours.

Rules 8b-1 through 8b-32 provides standard instructions to guide persons

The Assistant Secretary finds that good cause exists for not publishing the supplement to the Puerto Rico State Plan as a proposed change and making the Regional Administrator's approval effective upon publication for the following reasons:

1. The standards are identical to the Federal standards which were promulgated in accordance with Federal law meeting requirements for public participation.

2. The standards were adopted in accordance with the procedural requirement of State Law and further participation would be unnecessary.

The decision is effective October 23, 1981.

(Sec. 18 Pub. L. 91-366, 84 Stat. 1808 (29 U.S.C. 667))

Signed at New York City, New York, this 15th day of June 1981.

Roger A. Clark,
Regional Administrator

(FR Doc. 81-30745 Filed 10-22-81; 8:45 am)
BILLING CODE 4510-26-M

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards Subcommittee on Callaway Plant Location Change

The ACRS Subcommittee on Callaway Plant will hold a meeting on November 4 and 5, 1981, at the HOLIDAY INN WEST, 1900 I-70 Drive Northwest, Columbia, MO instead of the Hilton Inn.

Notice of this meeting was published in the Federal Register on October 18, 1981 (46 FR 51329), and all other items remain the same except for the location change as indicated above.

Dated: October 19, 1981.

John C. Hoyle,
Advisory Committee, Management Officer

(FR Doc. 81-30739 Filed 10-22-81; 8:45 am)
BILLING CODE 1500-01-M

Disposal or Onsite Storage of Thorium or Uranium Wastes From Past Operations

AGENCY: Nuclear Regulatory Commission (NRC).

ACTION: Discussion of options for NRC approval of applications for disposal or onsite storage of thorium or uranium wastes; interim use and public comment.

SUMMARY: This notice discusses five options for NRC approval of disposal or onsite storage of thorium or uranium wastes from past nuclear operations. The options are contained in a Branch

Technical Position for administration by the Uranium Fuel Licensing Branch, Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards.

DATES: Comments on the options for disposal or onsite storage of thorium or uranium are encouraged. Such comments will be considered in any subsequent revision of the Branch Technical Position. Comments are due December 22, 1981.

Note.—Comments received after the expiration date will be considered if it is practical to do so, but assurance of consideration cannot be given except as to comments filed on or before that date.

FOR FURTHER INFORMATION CONTACT: Ralph G. Page, Chief, Uranium Fuel Licensing Branch, Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards, Washington, D.C. 20555, telephone 301-427-4309.

SUPPLEMENTARY INFORMATION:

I. Introduction

Some of the sites formerly used for processing thorium and uranium are known today to be contaminated with residual radioactive materials. Some are currently covered by NRC licenses. Others were once licensed, but the licenses to possess and use material have expired. In many cases, the total amount of contaminated soil is large, but the activity concentrations of radioactive materials are believed sufficiently low to justify their disposal on privately owned lands or storage onsite rather than their transport to a licensed radioactive materials disposal (commercial) site. In many instances packaging and transporting these wastes to a licensed disposal site would be too costly and not justified from the standpoints of risk to the public health or cost-benefit. Furthermore, because of the total volume of these wastes, limited commercial waste disposal capacity, and restrictions placed on receipt of long-lived wastes at commercial sites, it is not presently feasible to dispose of these wastes at commercial low-level waste disposal sites.

Effective January 28, 1981, NRC regulations in 10 CFR 20, "Standards for Protection Against Radiation", were amended (45 FR 71761-71762) to delete § 20.304 which provided general authority for disposal of radioactive materials by burial in soil. Under the amended regulations, licensees must apply for and obtain specific NRC approval to dispose of radioactive materials in this manner under the provisions of 10 CFR 20.302. A case-by-case review was believed needed to

assure that burial of radioactive wastes would not present an unreasonable health hazard at some future date.

The deleted provisions of § 20.304 previously permitted burial of up to 100 millicuries of thorium or natural uranium at any one time, with a yearly limitation of 12 burials for each type of material at each site. The only disposal standards specified were (1) burial at a minimum depth of four feet, and (2) successive burials separated by at least six feet. Thus a total of 1.2 curies of these materials were permitted to be disposed of each year by burial in a 12 foot by 18 foot or larger plot of ground.

Under the amended regulations, it is incumbent on an applicant who wants to bury radioactive wastes to demonstrate that local land burial is preferable to other disposal alternatives. The evaluation of the application takes into account the following information: Types and quantities of material to be buried

Packaging of waste
Burial location
Characteristics of burial site
Depth of burial
Access restrictions to disposal site
Radiation safety procedures during disposal operations
Recordkeeping
Local burial restrictions, if any

For applications involving disposal of soils contaminated with low level concentrations of thorium and uranium (other than concentrations not exceeding EPA cleanup standards), the matters of principal importance are:

Concentrations of thorium and uranium (either in secular equilibrium with their daughters or without daughters present)
Volume of contaminated soil
Costs for offsite and onsite disposal
Availability of offsite burial space
Disposal site characteristics
Depth of burial and accessibility of buried wastes
State and local government views

II. Branch Technical Position

There are five acceptable options for disposal or onsite storage of thorium and uranium contaminated wastes. Applications for disposal or storage will be approved if the guidelines discussed under any option are met. Applications for other methods of disposal may be submitted and these will be evaluated on their own merits.

1. Disposal of acceptably low concentrations (which meet EPA cleanup standards) of natural thorium with daughters in secular equilibrium, depleted or enriched uranium, and

in land documents of record not to excavate below burial depths in specified areas of land without clearance by health authorities; not to construct residential or industrial building on the site; and not to use specified areas of land for agricultural purposes. Because of this, we believe it appropriate to apply a maximum critical organ exposure limit of 500 millirems per year to thorium and uranium buried under this restriction instead of 170 millirems as used in options 2 and 3. In addition, any exposure to such materials is likely to be more transient than assumed (essentially continual exposure) under those options. These two factors combine to increase the activity concentration limits calculated under option 2 by about 10. Thus, the average concentration that may be buried under this option for thorium (Th-232 plus Th-228) is 500 pCi/gm if all daughters are present and in equilibrium; for enriched uranium it is 1000 pCi/gm if the uranium is soluble and 2500 pCi/gm if insoluble; and for depleted uranium it is 1000 pCi/gm if the uranium is soluble and 3000 pCi/gm if insoluble.

With respect to natural uranium with daughters present and in equilibrium, the concentration that may be buried under this option is 200 pCi/gm of U-238 plus U-234, i.e., 100 pCi/gm Ra-226. This concentration is based on a limited exposure of 2.4 hours per day to limit the radon dose to less than 0.5 working level month (WLM) which is equivalent to continuous exposure to 0.02 working level (WL). Depending upon local soil characteristics, burials at depths greater than 4 feet may be required.

SUMMARY OF MAXIMUM CONCENTRATIONS PERMITTED UNDER DISPOSAL OPTIONS

Kind of Material	Disposal Options			
	1 ¹	2 ²	3 ³	4 ⁴
Natural Thorium (Th-232 + Th-228) with daughters present and in equilibrium	10	50		500
Natural Uranium (U-238 + U-234) with daughters present and in equilibrium	10		40	200
Depleted Uranium:				
*Soluble	35	100		1,000
*Insoluble	35	300		3,000
Enriched Uranium:				
*Soluble	30	100		1,000
*Insoluble	30	250		2,500

¹ Based on EPA cleanup standards.

² Concentrations based on limiting individual doses to 170 mrem/yr.

³ Concentration based on limiting equivalent exposure to 0.02 working level or less.

⁴ Concentrations based on limiting individual doses to 500 mrem/yr and, in case of natural uranium, limiting exposure to 0.02 working level or less.

5. Storage of licensed concentrations of thorium and uranium onsite pending

the availability of an appropriate disposal site.

When concentrations exceed those specified in option 4, long term disposal other than at a licensed disposal site will not normally be a viable option under the provisions of 10 CFR 20.302. In such cases, the thorium and uranium may be permitted to be stored onsite under an NRC license until a suitable method of disposal is found. License conditions will require that radiation doses not exceed those specified in 10 CFR Part 20 and be maintained as low as reasonably achievable.

Before approving an application to dispose of thorium or uranium under options 2, 3, or 4, NRC will solicit the view of appropriate State health officials within the State in which the disposal would be made.

Dated at Silver Spring, Maryland this 18th day of October, 1981.

Richard E. Cunningham,

Director, Division of Fuel Cycle and Material Safety, Office of Nuclear Material Safety and Safeguards.

[FR Doc. 81-30808 Filed 10-22-81; 8:45 am]

BILLING CODE 7990-01-M

OFFICE OF PERSONNEL MANAGEMENT

Postponement of Application Deadline for Fund-Raising Privileges Among Federal Employees by Private Voluntary Organizations

Section 5.43 of the "Manual on Fund-Raising Within the Federal Service for Voluntary Health and Welfare Agencies" sets December 1 of each year as the deadline by which national voluntary agencies must submit applications for participation in the Combined Federal Campaign (CFC) to be conducted in the fall of the following year. This year's deadline is being postponed from December 1, 1981, to February 1, 1982. In June 1981, the U.S. Office of Personnel Management (OPM) announced that the eligibility criteria for participation in the 1982-83 CFC are being reviewed. The deadline date is being postponed to avoid national voluntary agencies having to revise their applications to meet eligibility criteria which may be changed.

Donald J. Devine,

Director.

[FR Doc. 81-30730 Filed 10-22-81; 8:45 am]

BILLING CODE 6325-01-M

OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE

Resolution of Complaint of Price-Undercutting of Subsidized Cheese Imports

On October 1, 1981, the United States Trade Representative received a letter from the Secretary of Agriculture informing him of the Secretary's finding that imported Grade A Swiss type cheese produced in Finland has been offered for sale in the United States at duty-paid wholesale prices which are five cents per pound less than the domestic wholesale market price of similar cheese produced in the United States.

In accordance with Section 702(c)(2) of the Trade Agreements Act of 1979 (the Act) (19 U.S.C. 1202 note), the Office of the United States Trade Representative notified Finland of the price undercutting determination made by the Secretary of Agriculture, requested that corrective action be taken, and asked for appropriate assurances concerning the commitments made in the Arrangement Between the United States and Finland Concerning Cheese.

On October 14, 1981, Finland notified the United States Trade Representative that measures have been taken to ensure that the duty-paid wholesale price of imported Grade A Swiss type cheese produced in Finland will not be less than the domestic wholesale market price of similar cheese produced in the United States. In addition, Finland gave assurance it will respect the price commitments in the Arrangement. Since the above notification by Finland has occurred within the 15-day period provided in Section 702(c)(3) of the Act, the United States Trade Representative has notified the Secretary of Agriculture of his belief that no further action is required.

William E. Brock,

United States Trade Representative.

[FR Doc. 81-30884 Filed 10-22-81; 8:45 am]

BILLING CODE 3120-01-M

SECURITIES AND EXCHANGE COMMISSION

[Release No. 22236; 70-6650]

Arkansas Power & Light Co.; Proposed Issuance and Sale of First Mortgage Bonds

October 19, 1981.

Arkansas Power & Light Company

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MEMORANDUM FOR: Regional Administrators

Branch Chiefs

Division of Fuel Cycle and Material Safety, NMSS

FROM:

Richard E. Cunningham. Director

Division of Fuel Cycle and Material Safety, HMSS

SUBJECT:

POLICY AND GUIDANCE DIRECTIVE FC 83-23 :

TERMINATION OF BYPRODUCT, SOURCE AND SPECIAL

TERMINATION OF EXISTING, NUCLEAR MATERIAL LICENSES

The enclosed final rule specifies licensee responsibility and requirements for terminating a license issued under 10 CFR Parts 30, 40 and 70. Among other things, a licensee is required to submit on or before the expiration date a radiation survey report to confirm the absence of radioactive materials or to specify existing levels of residual radioactive contamination present from past operations. A survey report is not required if a licensee can demonstrate the absence of radioactive contamination in some other manner, such as the use only of sealed sources that never showed evidence of leakage. If detectable levels of residual radioactive contamination attributable to licensed operations are found, the license continues in force until the Commission notifies the licensee in writing that the license is terminated. The purpose of this memorandum is to provide guidance to the Regions and Headquarters staff on the findings that need to be made before written notification is given that the license is terminated.

Review Procedure

Before terminating a license where residual radioactive material contamination is present from past licensed operations, NRC should determine whether:

1. a reasonable effort has been made to eliminate residual contamination, and
2. residual radioactive contamination is acceptably low to permit unrestricted release of the affected facilities.

If the levels of residual radioactive contamination on surfaces and in soil are a small fraction of those normally acceptable for unrestricted release (see Section below), it is not necessary for the licensee to describe the efforts he has made to reduce contamination levels.

Policy and Guidance Directive FC 83-3: Standard Review Plan (SRP) for Termination of Special Nuclear Material Licenses for Fuel Cycle Facilities, contains information that is generally useful for terminating any byproduct, source or special nuclear material license.

pell
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In most cases involving short half-life radionuclides or operations involving only sealed sources, an independent confirmatory survey by NRC will not be necessary. Confirmatory surveys should always be made if the licensee's survey report appears suspect or past licensee operations involved the chemical processing of hundreds of milligrams of plutonium, tens of kilograms of enriched uranium 235 or hundreds of kilograms of source material. For materials licensees which used and processed hundreds of millicuries of long half-life radionuclides (> 1 yr), confirmatory surveys should also be made in all cases. If it is determined that a confirmatory survey will be made, a notice should be sent to the licensee informing him that the equipment and facilities should be held for NRC inspection. Discretion may be exercised as to whether a confirmatory survey is to be made if there is information available, such as inspection reports, which provides a basis for acceptance of the licensee's survey.

Contamination Levels Generally Acceptable for Unrestricted Release

- o Surface Contamination - See Enclosure 2
- o Soil Contamination - See Enclosure 3
- o Water Contamination - If surface or groundwater contamination is below EPA's National Interim Primary Drinking Water Regulations (EPA 570-9-76-003), the contamination is acceptable for unrestricted release.

If the levels of contamination exceed the levels discussed above and a judgment is made that further efforts to reduce the contamination is not necessary for termination of the license, an environmental impact assessment should be made to support the termination. Such cases should be brought to the attention of the Director of the Division of Fuel Cycle and Material Safety, NMSS, before the termination is dispatched.

Original Signed by
D. R. Chapell

 Richard E. Cunningham, Director
Division of Fuel Cycle and
Material Safety, NMSS

Enclosures:

1. Final Rule: Amendments to
10 CFR Parts 30, 40 and 70
Specifying Licensee Responsibility
for Nuclear Materials and Procedures
for Termination of Specific Licenses
2. Guidelines for Decontamination of Facilities
and Equipment Prior to Release for
Unrestricted Use or Termination of Licenses
for Byproduct, Source, or Special Nuclear *See previous concurrence sheets

FC
DRChapell
11/4/83

OFFICE	FCUP*	FCUF*	FCAF*	FCML	FCIC*	FCMC*	FC	
JRNAME	WTCrow	Table on Acceptable Soil Contamination Levels	RCBader/as	LCRouse	VSMiller	CEMacDonald	BSinger	RECunning



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

*For your info
Beltz
6/8/83*

JUN 23 1983

MEMORANDUM FOR: William J. Dircks
Executive Director for Operations

FROM: Robert B. Minogue, Director
Office of Nuclear Regulatory Research

SUBJECT: FINAL RULE: AMENDMENTS TO 10 CFR PARTS 30, 40, AND 70
SPECIFYING LICENSEE RESPONSIBILITY FOR NUCLEAR MATERIALS
AND PROCEDURES FOR TERMINATION OF SPECIFIC LICENSES

DISCUSSION

Background. At the present time, some NRC requirements for terminating a license are specified in the regulations, but others are implemented on an individual case basis. In particular, current regulations in 10 CFR Parts 30, 40, and 70 do not specifically address licensee responsibility for nuclear materials at the time of or following expiration of licenses or describe procedures for termination of licenses. In some cases licensees have failed to notify the Commission of their intent to terminate operations, allowed licenses to expire, and vacated the premises before the staff had an opportunity to inspect the premises for residual radioactive contamination. This situation has the potential for adverse public health and safety effects. License termination requirements are necessary to enable the Commission to determine that public health and safety are protected.

A proposed rule on the subject was approved by you and published in the Federal Register on October 26, 1982 (47 FR 47400). The draft Federal Register notice for the final rule contains an analysis of comments received on the proposed rule. No significant revisions have been made. Only changes of an editorial nature have been made in the final rule (see Enclosure A).

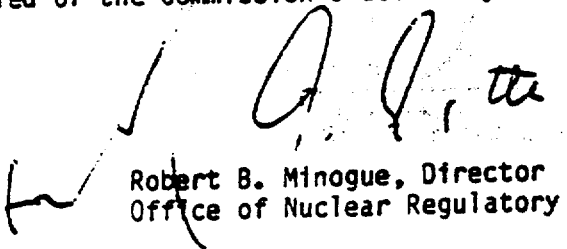
Final Regulations. The final rule requires each licensee, who does not apply for license renewal, to submit appropriate information concerning the disposal of nuclear materials and on the absence or presence of residual radioactive contamination. If radiation levels are suitable for release the license will be terminated. If significant residual radioactive contamination is detected, the license continues in effect, beyond the expiration date if necessary, with respect to possession of and responsibility for the residual radioactive contamination. The licensee must continue decontamination and control of contaminated areas until radiation levels are suitable for release. In addition, these licensees must submit a plan for decontamination and a final radiation survey report. Certain licensees, uranium recovery and some mill tailings disposal facilities under Part 40 and fuel fabrication licensees by license conditions, are currently required to submit plans. Requirements in this rule are supplementary to and consistent with existing requirements.

JUN 23 1983

RECOMMENDATIONS AND NOTATIONS

Recommendations. It is recommended that you approve the final rule and publication of a notice in the Federal Register (see Enclosure A). The rule will be made effective 30 days following publication in the Federal Register. It is also recommended that you certify that the final rule will not have a significant economic impact on a substantial number of small entities (see REGULATORY FLEXIBILITY CERTIFICATION in Enclosure A and the REGULATORY ANALYSIS, Enclosure B).

Notations. (1) The information collection requirements of this rule have been approved by the Office of Management and Budget (see Enclosure A). (2) No additional NRC resource requirements are anticipated as a result of this action. (3) The Agreement States reviewed a draft of the proposed rule and were informed of the proposed rulemaking. Additional rulemaking on the broad issues of decommissioning will be forthcoming from NRC, which will supplement this termination of license rule. Therefore, we will provide guidance then on the need for the States to adopt any portions of this rule to maintain compatibility. This will avoid the possibility of requiring States to amend their regulations twice in a relatively short period. (4) The Subcommittee on Nuclear Regulation of the Senate Committee on Environment and Public Works, the Subcommittee on Energy and the Environment of the House Committee on Interior and Insular Affairs, and the Subcommittee on Energy Conservation and Power of the House Committee on Energy and Commerce will be notified of the Commission's action by letter such as Enclosure C.



Robert B. Minoque, Director
Office of Nuclear Regulatory Research

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 30, 40, and 70

Amendments Specifying Licensee Responsibility
for Nuclear Materials and Procedures
for Termination of Specific Licenses

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission is amending its regulations to specify procedures for the termination of specific licenses authorizing possession and use of nuclear materials. The amendments clarify a licensee's authority and responsibility for nuclear materials and allow for orderly termination of specific licenses. The rule specifies that a license remains in effect, with respect to possession of residual nuclear materials present as contamination, until the Commission notifies the licensee, in writing, that the license is terminated. The rule is necessary to establish clear procedures for the termination of licenses and to establish a more coherent regulatory framework.

EFFECTIVE DATE: (Insert a date 30 days following publication in the Federal Register.)

FOR FURTHER INFORMATION CONTACT: K. G. Steyer, Chief, Chemical Engineering Branch, Office of Nuclear Regulatory Research, Nuclear Regulatory Commission, Washington, DC 20555, telephone (301)443-5910.

SUPPLEMENTARY INFORMATION:

BACKGROUND

On October 26, 1982, the Nuclear Regulatory Commission published in the Federal Register (47 FR 47400) a notice of proposed amendments to 10 CFR Parts 30, 40, and 70. The notice set forth procedures that a licensee would follow in terminating a specific nuclear materials license and clarified a licensee's responsibility for nuclear materials.

DISCUSSION

Need for the rule. Previously, the Commission's regulations required licensees under 10 CFR Parts 30, 40, and 70 to notify the Commission, in writing, when the licensee decided to terminate operations. This requirement is continued in the final rule. Licensees were not required by regulation to describe the disposition of nuclear materials authorized under the license or to characterize radiological conditions at the time of license termination. The Commission has requested information concerning disposition of nuclear materials and decontamination on an individual-case-basis. Information concerning residual radioactive contamination has been requested only where it was suspected of being a problem. The rule is necessary to establish clear procedures for termination of licenses and to establish a more coherent regulatory framework. It will enable the Commission to determine that there is no significant risk to public health and safety before a licensee's responsibility for nuclear materials is terminated.

Requirements established by the rule. The rule requires each licensee, who does not apply for license renewal, to submit appropriate information concerning the disposal of licensed nuclear materials and on the absence or presence of residual radioactive contamination. If radiation levels are suitable for release, the Commission will notify the licensee, in writing, that the license is terminated.

If significant residual radioactive contamination is detected, the license continues in force, beyond the expiration date if necessary, with respect to possession of and responsibility for the residual radioactive contamination. The licensee must continue decontamination and control of contaminated areas until radiation levels are suitable for release and the Commission notifies the licensee, in writing, that the license is terminated. In addition the licensee must submit a plan for decontamination and a final radiation survey report.

Analysis of Public Comments

The Federal Register notice provided a 60-day period for public comment. Letters containing a total of 21 comments were received from 12 commenters. Six letters were from electric power and utility companies (10 CFR Part 50 licensees), one from a nuclear fuel cycle licensee, three from consultant groups, and two from State and Federal agencies. Three comments specifically expressed support for the proposed rule and the remainder (18) suggested revisions, additions, and clarification. No comments specifically opposed the proposed rulemaking action. Copies of the comments may be examined in the Commission's Public Document Room at 1717 H Street NW, Washington, DC. The NRC response to the comments is presented below.

1. Comment. Many comments were directed at residual radioactivity levels. One commenter said that the rule requires a licensee to certify that no detectable radioactive contamination was found and that without specification of a lower level of detection the no detectable criteria standard is meaningless. Another commenter said that the word "detectable" should be replaced with the word "significant" [the commenter suggested that "significant" be defined as : Beta-gamma exposure rates which are greater than twice background and/or soil concentrations of natural uranium greater than 40 picocuries per gram or radium-226 concentrations greater than 20 picocuries per gram.]. Another commenter suggested that the rule changes should define the release criteria or "de minimis" radioactivity below which no further licensee control or decontamination is necessary, and referenced an NRC Inspection and Enforcement bulletin for

criteria. Another commenter said that an upper level for nondetectable radioactive contamination needs to be established and that the statement "suitable for release for unrestricted use" needs clarification.

Response. Residual and "de minimis" radioactivity levels are outside the scope of this rule. The issue of residual radioactivity levels suitable for release for unrestricted use will be considered in a separate rulemaking action. Meanwhile, NRC will continue to provide guidance, on an individual-case-basis, on suitable levels of residual contamination for unrestricted release.

The rule requires that radiation survey reports be submitted unless the licensee can demonstrate the absence of residual radioactive contamination in some other manner. Further, the rule requires that survey instruments used in making radiation surveys be identified. Using these data the staff can determine a lower level of detection for the specific radionuclide involved and the validity of a radiation survey. There is no requirement to define lower level of detection in this rule. The reason for using the criterion of detectability is that a large number of small licensees (e.g., licensees with sealed sources and small possession limits) can demonstrate absence of residual radioactive contamination with minimal effort and expense.

2. Comment. A comment indicated that there should be standards for NRC's decision on whether a radiation survey report is required or not.

Response. The standard used by the staff in this determination is whether or not there may be significant amounts of residual radioactive contamination. In a large number of cases (e.g., where only sealed sources were used, or where short half-life and relatively small quantities of nuclear materials are possessed) a radiation survey report will not be necessary. Clarification is believed to be desirable and the rule is revised to indicate that submittal of a radiation survey report is not necessary if the licensee can demonstrate the absence of residual radioactive contamination without conducting a special radiation survey.

3. Comment. A comment stated that NRC should establish standards for determining when a decontamination plan is to be submitted.

Response. The Regulatory Flexibility Act section in the preamble of the proposed rule discussed this matter. It said that in some cases detectable residual contamination may be present, but the level may be suitable for release. In these cases, the licensee would not be required to submit a plan for decontamination. As indicated in the response to comment number 1, the NRC will provide guidance concerning suitable levels for release on an individual-case-basis.

4. Comments. Two comments were received concerning the statement in the preamble that read, "Prescribed fees for licensing services rendered by NRC would continue to be applicable until a license is terminated." One comment stated that NRC regulations do not contain prescribed fees for license termination services rendered by NRC. It said further that since NRC services rendered during termination of a license would not be comparable to services rendered during license renewal, it is not appropriate to charge the same fees. The comment suggested that NRC estimate, in the same manner used to derive the figures in 10 CFR Part 170, the time involved in terminating a license and establish a corresponding limit on the fees to be charged to a licensee for license termination. The other comment stated that the fees prescribed for licensing services associated with residual nuclear materials should be significantly less than those prescribed for the originally-licensed facility.

Response. It is present Commission policy not to charge fees for Parts 30, 40, and 70 applications requesting termination of licenses. The language questioned by these comments was intended to mean that if any routine inspection was conducted before or after the expiration date of the license but before the license was terminated, the Commission would assess a fee for the inspection since the license was valid at the time the inspection was conducted. Under the current fee schedule, any non-routine (close-out) inspection is not charged to the licensee.

5. Comment. One comment stated that the word "immediately" [in §§ 30.36(b), 40.42(b), and 70.38(b) in regard to written notification when a licensee decides to terminate operations] should be clarified or defined. This comment suggested that licensees should notify the Commission 90 days prior to vacating the premises.

Response. A licensee may decontaminate and terminate projects at any time under an active license. However, license termination procedures can be most expeditiously followed if a licensee notifies the Commission as soon as the licensee decides to terminate operations. The intent of the rule is that decontamination should be accomplished and the license terminated as soon as practical, after the licensee decides to terminate operations.

6. Comment. One comment suggested that licensees should be allowed to continue some or all normal activities while decontamination activities are conducted.

Response. Normal operating activities can be continued during decontamination as long as the license has not expired. But, unless the licensee makes timely application for license renewal, nuclear materials must be transferred or disposed of before the license expiration date. Only activities related to decontamination and control of nuclear materials are permitted beyond the license expiration date, unless a timely license renewal application has been submitted (i.e., 30 days or more before the license expiration date).

7. Comment. A concern of several public utility companies (10 CFR Part 50 licensees) is how the new rule affects them in relation to licenses issued to possess and use nuclear materials under 10 CFR Parts 30, 40, and 70.

Response. Production and utilization facility licensees (10 CFR Part 50 licensees) may be issued licenses to possess and use byproduct, source, and/or special nuclear material, before they receive an Operating License for the facility. If the license to possess and use nuclear materials expires before an Operating License is issued, it must be renewed or terminated. Renewal is usually accomplished by amending the nuclear materials license to extend the expiration date, which is done by license condition. If the holder of a Construction Permit decides to terminate a nuclear materials license, e.g., a new fuel license issued under Part 70, before a Part 50 Operating License is issued, the requirements of this rule apply. When a Part 50 Operating License is issued, the nuclear materials license is automatically terminated. Requirements for possession

and use of nuclear materials are contained in the Part 50 Operating License and the requirements of this rule do not apply. No revision to the rule is necessary to accommodate these comments.

8. Comment. One comment stated that the substance of Form 314 was not made part of the rule nor the explanation of the proposed rule. The comment suggested it be made part the final rule.

Response. NRC Form 314, "Certification of Disposition of Materials," is sent to each NRC materials licensee 90 days before expiration of the license. This form requests information as to whether or not nuclear materials have been procured. It also requests information concerning disposal of nuclear materials, such as transfer to an NRC licensee, transfer to an Agreement State licensee, or disposal in some other manner. NRC Form-314 is used to obtain information concerning termination of specific licenses. OMB recently approved this form under approval number 3150-0028. As part of the approval process it was determined that this form, and the information required by it, is the best method of obtaining this information. Because the information required by the form is not a subject of this rulemaking action, it is not necessary to include the contents of the form in the rule.

9. Comment. One comment stated that there was no mention in the proposed rule as to the effective date of the amendments and whether licensees who have submitted requests for decommissioning or license termination prior to the passage of the rule are exempt.

Response. These amendments will codify procedures that are currently being used on an individual-case-basis. This rule does not significantly alter existing procedures. It is intended that the rule changes be made effective in the usual manner, that is 30 days following notice of final rulemaking published in the Federal Register. The provisions of the rule are applicable to any licensee who decides to terminate a license after this date.

Changes from proposed rule. There have been no significant revisions to the proposed rule as a result of public comments or reviews during final rulemaking procedures. However, several changes of a clarifying or editorial nature have been made. The changes are as follows:

1. Editorial changes have been made in §§ 30.36(b) and (e), 40.42(b) and (e), and 70.38(b) and (e).

2. It was apparently not clear in the proposed rule that licensees may decontaminate affected facilities prior to the license expiration date. Changes have been made in §§ 30.36(d)(1) and (3), 40.42(d)(1) and (3), and 70.38(d)(1) and (3) to clarify that licensees are authorized to conduct decontamination activities, in fact must decontaminate to the extent practicable, before the license expires.

3. Changes have been made in §§ 30.36(d)(1)(v)(A) and (B), 40.42(d)(1)(v)(A) and (B), and 70.38(d)(1)(v)(A) and (B) to (1) clarify that submittal of a radiation survey report is not necessary if a licensee can demonstrate absence radioactive contamination without conducting a survey, (2) add units for reporting radioactive contamination in water and indicate that not all of the units listed are appropriate for all licensees, and (3) specify that instruments used in radiation surveys must be working properly.

ENVIRONMENTAL IMPACT

These amendments clarify requirements for termination of a licensee's responsibility for nuclear materials. The amendments do not add substantive requirements from an environmental viewpoint. Environmentally they are nonsubstantive and insignificant. No environmental impact statement, appraisal, or negative declaration needs to be prepared under 10 CFR 51.5(d)(3).

PAPERWORK REDUCTION ACT STATEMENT

This final rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3510, et. seq.). These requirements were approved by the Office of Management and Budget under approval numbers: Part 30 - 3150-0017; Part 40 - 3150-0020; and Part 70 - 3150-0009.

REGULATORY ANALYSIS

The NRC has prepared a regulatory analysis on this regulation. The analysis examines the benefits and costs of the alternatives considered by the staff. Interested parties may examine a copy of the regulatory analysis at the Commission's Public Document Room at 1717 H Street NW, Washington, DC. Single copies of the analysis may be obtained from W. R. Pearson, Chemical Engineering Branch, Office of Nuclear Regulatory Research, Nuclear Regulatory Commission, Washington, DC 20555, telephone (301)443-5910.

REGULATORY FLEXIBILITY CERTIFICATION

In accordance with the Regulatory Flexibility Act of 1980, the Executive Director for Operations certifies that this action will not have a significant economic impact on a substantial number of small entities.

The rule applies to the Commission's approximately 8,100 materials licensees under 10 CFR Parts 30-35, 40, and 70. These licensees include about 5,000 byproduct material licenses under Parts 30, 32, 33, and 34, 2,000 medical licenses under Part 35, 400 source material licenses under Part 40, and 700 special nuclear material licenses under Part 70. The rule affects about 200 NRC licensees per year who wish to terminate operations.

The NRC estimates that about 90% of the affected licensees would be considered small entities under the criteria set out in the size standards of the Small Business Administration in 13 CFR Part 121 (e.g., most licensees with less than 500 employees, hospitals with less than 150 beds, other medical licenses with less than \$1.5 million annual gross receipts). In developing the rule, the NRC specifically considered the potential problems that would face a small entity under these requirements. The NRC has attempted to structure the requirements to mitigate the economic effect of the rule on small entities to the extent possible considering the Commission's responsibility for public health and safety.

Although there is not an absolute correlation between the size of a licensee and the requirements of the regulation, in general, the regulation will have minimal incremental impact on most small licensees.

This rule specifies the procedures to be followed when a licensee desires to terminate a materials license. Each licensee is required to -

1. Submit a form NRC-314 that describes the disposal of licensed materials;
2. Submit a final radiation survey, unless the licensee demonstrates the absence of residual radioactive contamination in some other manner; and either
3. Submit a certification that residual radioactive contamination attributable to activities conducted under the license is not detectable; or
4. Where residual radioactive contamination is present, submit a radiation survey report and a plan for decontamination, if required. In some cases, detectable residual contamination may be present, but the level may be suitable for release. In these cases, the licensee will not be required to submit a plan for decontamination.

The NRC believes that about 99% of the small entities affected by the rule will be able to comply with the requirements by following the simplest procedure. These licensees would submit a form NRC-314 and certify that no residual contamination attributable to activities conducted under the license is present. Data collection for form NRC-314 is similar to actions performed during regular operations. Some clerical and management time is required to complete the form and submit it. The average impact on small licensees, as a result of requiring submittal of a form NRC-314, is estimated to be less than an hour at an approximate cost of \$20. Submittal of a certification letter would require only clerical and management personnel. Preparation and submittal of this letter would probably require about an hour at an approximate cost of \$20. NRC Form-314, as approved by OMB, has been revised to contain provisions for certification, which will reduce this cost. It is estimated that the total impact on small licensees under the simple procedure will be about one-half person-day of effort at an approximate cost of \$80. Some licensees will also be required to submit a final radiation survey

report. However, many licensees will not, in particular licensees with sealed sources and byproduct licensees with small license possession limits and short half-life materials. A radiation survey must be conducted by qualified personnel (usually a health physics technician), the report assembled, and submitted. In cases involving extensive contaminated areas some land surveying, sample drilling, and special analyses may be involved. These actions involve health physics, management, clerical, and possibly other types of personnel. On the average for small licensees the impact of submitting radiation survey reports is estimated to be less than one-half person-day at a cost of approximately \$80. For some larger licensees the average is estimated to be about two person-days at a cost of approximately \$320.

The NRC believes that less than 1% of the affected small licensees will be required to submit a decontamination plan. This action will require the average small licensee to expend about one-half person-day of effort at an approximate cost of \$80. A comparable effort might require the average larger licensee to expend about four person-days of effort at an approximate cost of \$640. Preparation and submittal of a decontamination plan requires use of technical, management, clerical, and possibly other types of personnel. Preparation of this plan would be facilitated by using technical and management personnel familiar with the operations.

LIST OF SUBJECTS IN 10 CFR PARTS 30, 40, AND 70

Part 30 - Byproduct material, Government contracts, Intergovernmental relations, Isotopes, Nuclear materials, Penalty, Radiation protection, Reporting requirements.

Part 40 - Government contracts, Hazardous materials - transportation, Nuclear materials, Penalty, Reporting requirements, Source material, Uranium.

Part 70 - Hazardous materials - transportation, Nuclear materials, Packaging and containers, Penalty, Radiation protection, Reporting requirements, Scientific equipment, Security measures, Special nuclear material.

FINAL RULEMAKING

The NRC is adopting the following amendments to 10 CFR Parts 30, 40, and 70 under the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and 5 U.S.C. 553.

PART 30 - RULES OF GENERAL APPLICABILITY TO DOMESTIC LICENSING
OF BYPRODUCT MATERIAL

1. The authority citation for Part 30 is revised to read as follows:

AUTHORITY: Secs. 81, 82, 161, 182, 183, 186, 68 Stat. 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2111, 2112, 2201, 2232, 2236, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 30.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 295 (42 U.S.C. 5851). Section 30.34(b) also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 30.61 also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 30.3, 30.34(b) and (c), 30.41(a) and (c) and 30.53 are issued under sec. 161b., 68 Stat. 948 as amended (42 U.S.C. 2201(b)); and §§ 30.36, 30.51, 30.52, and 30.55 issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

2. Remove the authority citations following:

Sections 30.3, 30.4, 30.5, 30.11, 30.12, 30.13, 30.14, 30.15, 30.16, 30.18, 30.19, 30.20, 30.31, 30.32, 30.33, 30.34, 30.39, 30.41, 30.51, 30.53, 30.55, 30.61, and 30.71.

§ 30.34 [Amended]

3. Section 30.34 is amended by removing and reserving paragraph (f).

4. Section 30.36 is revised to read as follows:

§ 30.36 Expiration and termination of licenses.

(a) Except as provided in § 30.37(b) and paragraph (d)(3) of this section, each specific license expires at the end of the day, in the month and year stated in the license.

(b) Each licensee shall notify the Commission immediately, in writing under § 30.6, and request termination of the license when the licensee decides to terminate all activities involving materials authorized under the license. This notification and request for termination of the license must include the reports and information specified in paragraphs (d)(1)(iv) and (v) of this section. The licensee is subject to the provisions of paragraphs (d) and (e) of this section, as applicable.

(c) No less than 30 days before the expiration date specified in a specific license, the licensee shall either -

(1) Submit an application for license renewal under § 30.37; or

(2) Notify the Commission, in writing under § 30.6, if the licensee decides not to renew the license.

(d)(1) If a licensee does not submit an application for license renewal under § 30.37, the licensee shall, on or before the expiration date specified in the license -

(i) Terminate use of byproduct material;

(ii) Remove radioactive contamination to the extent practicable;

(iii) Properly dispose of byproduct material;

(iv) Submit a completed form NRC-314; and

(v) Submit a radiation survey report to confirm the absence of radioactive materials or to establish the levels of residual radioactive contamination, unless the licensee demonstrates the absence of residual radioactive contamination in some other manner. The licensee shall, as appropriate -

(A) Report levels of radiation in units of microrads per hour of beta and gamma radiation at one centimeter and gamma radiation at one meter from surfaces and report levels of radioactivity in units of disintegrations per minute (or microcuries) per 100 square centimeters removable and fixed on surfaces, microcuries per milliliter in water, and picocuries per gram in contaminated solids such as soils or concrete; and

(8) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(2) If no residual radioactive contamination attributable to activities conducted under the license is detected, the licensee shall submit a certification that no detectable radioactive contamination was found. If the information submitted under this paragraph and paragraphs (d)(1)(iv) and (v) of this section is adequate, the Commission will notify the licensee in writing that the license is terminated.

(3)(i) If detectable levels of residual radioactive contamination attributable to activities conducted under the license are found, the license continues in effect beyond the expiration date, if necessary, with respect to possession of residual byproduct material present as contamination until the Commission notifies the licensee in writing that the license is terminated. During this time, the licensee is subject to the provisions of paragraph (e) of this section.

(ii) In addition to the information submitted under paragraphs (d)(1)(iv) and (v) of this section the licensee shall submit a plan for decontamination, if required, as regards residual radioactive contamination remaining at the time the license expires.

(c) Each licensee who possesses residual byproduct material under paragraph (d)(3) of this section, following the expiration date specified in the license shall -

(1) Limit actions involving byproduct material to those related to decontamination and other activities related to preparation for release for unrestricted use; and

(2) Continue to control entry to restricted areas until they are suitable for release for unrestricted use and the Commission notifies the licensee in writing that the license is terminated.

PART 40 - DOMESTIC LICENSING OF SOURCE MATERIAL

5. The authority citation for Part 40 is revised to read as follows:

AUTHORITY: Secs. 62, 63, 64, 65, 81, 161, 182, 183, 186, 68 Stat. 932, 933, 935, 948, 953, 954, 955, as amended, secs. 11e(2), 83, 84, Pub.

L. 95-604, 92 Stat. 3033, as amended, 3039, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2014(e)(2), 2092, 2093, 2094, 2095, 2111, 2113, 2114, 2201, 2232, 2233, 2236, 2282); secs. 274, Pub. L 86-373, 73 Stat. 688 (42 U.S.C. 2021); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 40.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851). Section 40.31 (g) also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 40.46 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 40.71 also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 40.3, 40.25(d)(1)-(3), 40.35(a)-(d), 40.41(b) and (c), 40.46, 40.51(a) and (c), and 40.63 are issued under sec. 161b, 68 Stat. 948, as amended, (42 U.S.C. 2201(b)); and §§ 40.25(c) and (d)(3) and (4), 40.26(c)(2), 40.35(e), 40.42, 40.61, 40.62, 40.64 and 40.65 are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

6. Remove the authority citations following:

Sections 40.1, 40.2a, 40.3, 40.4, 40.11, 40.13, 40.14, 40.21, 40.22, 40.25, 40.26, 40.31, 40.32, 40.34, 40.35, 40.41, 40.45, 40.51, 40.61, 40.62, 40.63, 40.64, 40.65, 40.71, and Appendix A.

§ 40.41 [Amended]

7. Section 40.41 is amended by removing paragraph (f).

8. Section 40.42 is revised to read as follows:

§ 40.42 Expiration and termination of licenses.

(a) Except as provided in § 40.43(b) and paragraph (d)(3) of this section, each specific license expires at the end of the day, in the month and year stated in the license.

(b) Each licensee shall notify the Commission immediately, in writing under § 40.5, and request termination of the license when the licensee decides to terminate all activities involving materials authorized under the license. This notification and request for termination of the license

must include the reports and information specified in paragraphs (d)(1)(iv) and (v) of this section. The licensee is subject to the provisions of paragraphs (d) and (e) of this section, as applicable.

(c) No less than 30 days before the expiration date specified in a specific license the licensee shall either -

(1) Submit an application for license renewal under § 40.43; or

(2) Notify the Commission, in writing under § 40.5, if the licensee decides not to renew the license.

(d)(1) If a licensee does not submit an application for license renewal under § 40.43, the licensee shall, on or before the expiration date specified in the license -

(i) Terminate use of source material;

(ii) Remove radioactive contamination to the extent practicable;

(iii) Properly dispose of source material;

(iv) Submit a completed form NRC-314; and

(v) Submit a radiation survey report to confirm the absence of radioactive materials or to establish the levels of residual radioactive contamination, unless the licensee demonstrates the absence of residual radioactive contamination in some other manner. The licensee shall, as appropriate -

(A) Report levels of radiation in units of microrads per hour of beta and gamma radiation at one centimeter and gamma radiation at one meter from surfaces and report levels of radioactivity in units of disintegrations per minute (or microcuries) per 100 square centimeters removable and fixed on surfaces, microcuries per milliliter in water, and picocuries per gram in contaminated solids such as soils or concrete; and

(B) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(2) If no residual radioactive contamination attributable to activities conducted under the license is detected, the licensee shall submit a certification that no detectable radioactive contamination was found. If the information submitted under this paragraph and paragraphs (d)(1)(iv) and (v) of this section is adequate, the Commission will notify the licensee in writing that the license is terminated.

(3)(i) If detectable levels of residual radioactive contamination attributable to activities conducted under a license are found, the license continues in effect beyond the expiration date, if necessary, with respect to possession of residual source material present as contamination until the Commission notifies the licensee in writing that the license is terminated. During this time the licensee is subject to the provisions of paragraph (e) of this section.

(ii) In addition to the information submitted under paragraphs (d)(1)(iv) and (v) of this section the licensee shall submit a plan for decontamination, if required, as regards residual radioactive contamination remaining at the time the license expires.

(e) Each licensee who possesses residual source material under paragraph (d)(3) of this section, following the expiration date specified in the license, shall -

(1) Limit actions involving source material to those related to decontamination and other activities related to preparation for release for unrestricted use; and

(2) Continue to control entry to restricted areas until they are suitable for release for unrestricted use and the Commission notifies the licensee in writing that the license is terminated.

9. Section 40.71 is amended by removing paragraph (d) and revising the section heading to read as follows:

§ 40.71 Modification and revocation of licenses.

* * * * *

PART 70 - DOMESTIC LICENSING OF SPECIAL NUCLEAR MATERIAL

10. The authority section for Part 70 is revised to read as follows:

AUTHORITY: Secs. 51, 53, 161, 182, 183, 68 Stat. 929, 930, 948, 953, 954, as amended, (42 U.S.C. 2071, 2073, 2201, 2232, 2233); secs. 201, as amended, 202, 204, 206, 88 Stat. 1242, as amended, 1244, 1245, 1246 (42 U.S.C. 5841, 5842, 5845, 5846).

Section 70.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851). Section 70.21(g) also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 70.31 also issued under sec. 57d, Pub. L. 93-377, 88 Stat. 475 (42 U.S.C. 2077). Sections 70.36 and 70.44 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 70.61 also issued under secs. 186, 187, 68 Stat. 955 (42 U.S.C. 2236, 2237). Section 70.62 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273), §§ 70.3, 70.19(c), 70.24(a) and (b), 70.32(a)(3), (5), (6), and (d), 70.36, 70.39(b) and (c), 70.41(a), 70.42(a) and (c), 70.56, 70.57(b), (c) and (d), 70.58(a)-(g)(3), and (h)-(j) are issued under sec. 161b, 68 Stat. 948 as amended (42 U.S.C. 2201(b)); §§ 70.20a(d), 70.20b (c) and (e), 70.21(c), 70.24(b), 70.32(e) and (g), 70.56, 70.57(b) and (d) and 70.58(a)-(g)(3), and (h)-(j) are issued under sec. 161f, 68 Stat. 949, as amended (42 U.S.C. 2201(f)); and §§ 70.20b(d) and (e), 70.38 70.51-70.55, 70.58(g)(4), (k), and (l) and 70.59 are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

11. Remove the authority citations following:

Sections 70.1, 70.3, 70.4, 70.11, 70.14, 70.19, 70.22, 70.23, 70.31, 70.32, 70.36, 70.39, 70.41, 70.42, 70.44, 70.51, 70.53, 70.54, 70.55, 70.57, 70.59, 70.61, 70.62, 70.71.

12. Section 70.32 is amended by removing and reserving paragraph (h) and revising paragraph (a) to read as follows:

§ 70.32 Conditions of licenses.

(a) Each license shall contain and be subject to the following conditions:

*	*	*	*	*
(h) (Reserved)				
*	*	*	*	*

13. A new § 70.38 is added to read as follows:

§ 70.38 Expiration and termination of licenses.

(a) Except as provided in § 70.33(b) and paragraph (d)(3) of this section each specific license expires at the end of the day, in the month and year stated in the license.

(b) Each licensee shall notify the Commission immediately, in writing under § 70.5, and request termination of the license when the licensee decides to terminate all activities involving materials authorized under the license. This notification and request for termination of the license must include the reports and information specified in paragraphs (d)(1)(iv) and (v) of this section. The licensee is subject to the provisions of paragraphs (d) and (e) of this section, as applicable.

(c) No less than 30 days before the expiration date specified in a specific license the licensee shall either -

(1) Submit an application for license renewal under § 70.33; or

(2) Notify the Commission, in writing under § 70.5, if the licensee decides not to renew the license.

(d)(1) If a licensee does not submit an application for license renewal under § 70.33, the licensee shall, on or before the expiration date specified in the license -

(i) Terminate use of special nuclear material;

(ii) Remove residual radioactive contamination to the extent practicable;

(iii) Properly dispose of special nuclear material;

(iv) Submit a completed form NRC-314; and

(v) Submit a radiation survey report to confirm the absence of radioactive materials or to establish the level of residual radioactive contamination, unless the licensee demonstrates the absence of residual radioactive contamination in some other manner. The licensee shall, as appropriate -

(A) Report levels of radiation in units of microrads per hour of beta and gamma radiation at one centimeter and gamma radiation at one meter from surfaces and report levels of radioactivity in units of disintegrations per minute (or microcuries) per 100 square centimeters removable and fixed on surfaces, microcuries per milliliter in water, and picocuries per gram in contaminated solids such as soils or concrete; and

(B) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(2) If no residual radioactive contamination attributable to activities conducted under the license is detected, the licensee shall submit a certification that no detectable radioactive contamination was found. If the information submitted under this paragraph and paragraphs (d)(1)(iv) and (v) of this section is adequate, the Commission will notify the licensee in writing that the license is terminated.

(3)(i) If detectable levels of residual radioactive contamination attributable to activities conducted under the license are found, the license continues in effect beyond the expiration date, if necessary, with respect to possession of residual special nuclear material present as contamination until the Commission notifies the licensee in writing that the license is terminated. During this time the licensee is subject to the provisions of paragraph (e) of this section.

(ii) In addition to the information submitted under paragraphs (d)(1)(iv) and (v) of this section the licensee shall submit a plan for decontamination, if required, as regards residual radioactive contamination remaining at the time the license expires.

(e) Each licensee who possesses residual special nuclear material under paragraph (d)(1) of this section, following the expiration date specified in the license shall -

(1) Limit actions involving special nuclear material to those related to decontamination and other activities related to preparation for release for unrestricted use; and

(2) Continue to control entry to restricted areas until they are suitable for release for unrestricted use and the Commission notifies the licensee in writing that the license is terminated.

Dated at Bethesda, Maryland this _____ day of _____, 1983.

For the Nuclear Regulatory Commission.

William J. Dircks,
Executive Director for Operations.

REGULATORY ANALYSIS

Amendments to 10 CFR Parts 30, 40, and 70 Specifying Licensee Responsibility for Nuclear Materials and Procedures for Termination of Specific Licenses

1. STATEMENT OF PROBLEM

Some NRC requirements for terminating licenses issued under 10 CFR Parts 30, 40, and 70 are specified in the regulations. But some requirements are implemented on an individual case basis. In particular existing regulations in 10 CFR Parts 30, 40, and 70 do not specifically address responsibility for nuclear materials at the time of or following expiration of licenses or describe procedures for termination of specific licenses. This rule will apply to over 8,000 Commission licensees under 10 CFR Parts 30, 40, and 70, and will affect about 200 licensees per year who decide to permanently discontinue activities. It codifies procedures that licensees must follow in terminating a license and specifies licensees' responsibility regarding residual nuclear materials.

2. OBJECTIVES

The staff focused on the following objectives in developing this final rule:

2.1 To clarify 10 CFR Parts 30, 40, and 70 licensees' responsibility for nuclear materials as regards termination of specific licenses,

2.2 To promulgate procedures that licensees must follow in terminating specific licenses issued under 10 CFR Parts 30, 40, and 70,

2.3 To consider the economic impact on licensees, especially small licensees, and promulgate a rule that is commensurate with the Commission's responsibility for public health and safety, and

2.4 To consider and select the appropriate procedural approach for issuing the requirements.

3. ALTERNATIVES

The alternatives considered for each of the objectives in Section 2 of this regulatory analysis are discussed below.

3.1 Clarify Licensee's Responsibility for Nuclear Materials

3.1.1 No action. At the present time, some NRC requirements for terminating a license are specified in the regulations, but others are implemented on an individual-case-basis. In particular, current regulations in 10 CFR Parts 30, 40, and 70 do not specifically address licensee responsibility for nuclear materials at the time of or following expiration of licenses or describe procedures for termination of licenses. In some cases licensees have failed to notify the Commission of their intent to terminate operations, allowed licenses to expire, and vacated premises before the staff was aware of or had opportunity to inspect the premises for residual radioactive contamination. This situation has the potential for adverse public health and safety effects. Clarification of license termination requirements is believed necessary to protect public health safety.

3.1.2 Rulemaking action. For reasons stated in the Value/Impact Analysis for the proposed rule and discussed in this Regulatory Analysis, rulemaking action is considered necessary. Sections 3.1.2.1 through 3.1.2.4 discuss alternatives considered in developing this rule.

3.1.2.1 Chosen Alternative. The major concern is to establish that the licensee is responsible for safe control of nuclear materials. Safe control of nuclear materials extends until the licensee meets conditions for unrestricted

release of nuclear facilities, regardless of the expiration date specified in the license. The expiration date is the mechanism used by the staff to periodically update safety and environmental information related to a license. Thus, a license expiration date is retained. The alternatives selected, as minimum requirements, are that licensees (1) notify the Commission in writing when the licensee decides to permanently discontinue operations, (2) terminate use of nuclear materials, (3) dispose of readily removable nuclear materials, and (4) certify the absence of residual radioactive contamination or demonstrate that radiation levels are suitable for release before the license is terminated. If there is a significant amount of residual radioactive contamination, the license continues in effect, as regards residual radioactive contamination, until decontamination is complete. The licensee must continue decontamination and control of contaminated areas, until radioactive contamination levels are suitable for release, and the Commission notifies the licensee that the license is terminated.

3.1.2.2 Alternative. One comment received during the comment period suggested that licensees be allowed to continue some or all of their normal activities during decontamination. Normal activities could be continued during decontamination, provided these activities are completed before the license expiration date. But, unless the licensee makes timely application for license renewal (i.e., 30 days or more before the license expiration date), nuclear materials shall be transferred or disposed of before the license expires. Only activities related to decontamination and control of nuclear materials are permitted beyond the license expiration date, unless timely license renewal is requested.

3.1.2.3 Alternative. In some cases licensees permit their license to expire, but still possess nuclear materials and desire to continue licensed activities. In some cases licensees who wish to terminate their license cannot find authorized recipients for their materials. It was suggested that this rule require licensees in these situations to place all licensed materials into secure storage. The rule was not modified in this respect because this rule is concerned with terminating licenses. In order to terminate licenses authorizing possession and use of nuclear materials, proper disposal of the

nuclear material is essential. That is, readily removable nuclear materials must be transferred or otherwise disposed of in some authorized manner. Residual radioactive contamination should be removed before the license expires, but this is not always possible because of the time required for decontamination in some cases. As for retention of readily removable nuclear materials, this is best handled through existing procedures for license renewal or through amendment of the license. Any licensee who retains readily removal nuclear materials beyond the license expiration date must have Commission approval.

3.1.2.4 Alternative. The normal method for demonstrating the absence of radioactive contamination is through the use of a radiation survey. However, in many cases; e.g., licensees who do not possess nuclear materials, licensees with small possession limits, licensees with non-leaking sealed sources; a radiation survey is not necessary. Licensees who possess and use uncontained nuclear materials will be required to submit a radiation survey, unless the licensee can demonstrate the absence of radioactive contamination in some other manner. The final rule is modified to reflect this intent more clearly.

3.2 Procedures for Termination of Licenses

3.2.1 Notify the Commission when the Licensee Decides to Permanently Discontinue Activities. This is an existing regulation. No alternative was considered.

3.2.2 Terminate Use of Nuclear Materials. See discussion under Section 3.1.2.2.

3.2.3 Properly Dispose of Nuclear Materials. See discussion under Section 3.1.2.3.

3.2.4 Submit Form NRC-314. NRC-314, "Certification of Disposition of Materials" is sent to each NRC materials licensee 90 days before the expiration date of a license. This form provides information as to the disposal of nuclear materials. It has been recently revised to provide notification for

termination of license. NRC Form-314 has been approved by OMB under approval number 3150-0028.

3.2.5 Submit a Radiation Survey Report. See discussion under Section 3.1.2.4. This reporting requirement has been approved by OMB.

3.2.6 Units of Radiation. Units for reporting radiation are specified to ensure consistency in radiation survey reports. The units specified are consistent with NRC regulations and practices.

3.2.7 Specify Instruments Used for Radiation Surveys. The staff needs to know the type of instrument used in radiation surveys so that it can determine if the use of that instrument is appropriate. The design, sensitivity, and range are important in determining if any instrument is appropriately used. In addition, the operability (e.g., calibration, field testing, maintenance) of the instrument is also important. The final rule is revised to include certification of calibration and testing of the instrument(s).

3.2.8 Submit a Plan for Decontamination. If significant residual radioactive contamination is detected, the licensee will have to submit a plan for decontamination. A decontamination plan is evolved from the facility design and from procedures and schedules established by the licensee when the licensee evaluates the tasks necessary to accomplish decontamination. It is necessary for the licensee to develop plans because the licensee must communicate and coordinate decontamination tasks. Submittal of a decontamination plan to NRC is required so that the staff can evaluate safety aspects of the plan and to provide the basis for inspections and making a determination that decontamination is accomplished in a safe manner. This reporting requirement has been approved by OMB.

3.3 Impact on Licensees

A major problem in developing the proposed rule was to adjust the requirements to treat all licensees fairly and still provide reasonable assurances that there is no unreasonable risk to public health and safety. A graded approach was selected for procedures related to terminating a license. At a

minimum, licensees must (1) notify the Commission when the licensee decides to permanently discontinue activities under the license, (2) terminate use of nuclear materials, (3) dispose of nuclear materials, (4) submit a completed form NRC-314, and (5) certify that no residual radioactive contamination attributable to activities conducted under the license is detected. These are the minimum requirements believed necessary to establish a record demonstrating protection of public health and safety.

Where significant residual radioactive contamination is present, the licensee must also submit a plan for decontamination. The licensee must decontaminate the nuclear facility before the license is terminated. See discussion under 3.2.8.

3.3.1 Alternative. Certain licensees could be exempted from the rule. A large number of licensees conduct activities that have small potential impact on public health and safety. Exempting these licensees could reduce the economic burden. This alternative was not selected for two reasons. First, there would be no record to demonstrate that public health and safety is protected. This could be very important where safety questions are raised after a nuclear facility is released for unrestricted use. Second, a primary purpose of the rule could be circumvented. A primary purpose of the rule is to clarify that licensees are responsible for safe control of nuclear materials, beyond the license expiration if necessary.

3.4 Procedural Approach

The value/impact analysis for the proposed rule concluded that a proposed rule should be published in the Federal Register with a 60-day period allowed for public comment. Copies of the comments received may be examined at the Commissions Public Document Room at 1717 H Street NW, Washington, D.C. Responses to the comments are contained under SUPPLEMENTARY INFORMATION in the preamble to the final rule, which is published in the Federal Register. There is no apparent reason to change the conclusion that a final rule, subject to codification, should be published in the Federal Register.

4. CONSEQUENCES

4.1 Benefits and Costs

4.1.1 Benefits

4.1.1.1 NRC. The final rule will clarify licensees' authority and responsibility for nuclear materials regarding termination of licenses. The final rule also sets forth procedures licensees must follow at the time of license termination. This will reduce uncertainties in licensing procedures, reduce communications necessary to obtain necessary information, and allow for orderly termination of licenses.

4.1.1.2 Other Government Agencies. The rule will not affect other Federal Agencies; unless they are NRC licensees. For agencies licensed by NRC the benefits are similar to those discussed in Section 4.1.1.3 below.

4.1.1.3 Industry. The proposed action would require licensees to submit a report describing the disposal of nuclear materials, i.e., Form NRC-314. Data collection for form NRC-314 would be similar to routine operations and would involve personnel skills readily available to the licensee. It is estimated that less than one-half person-day of effort will be required to prepare this submittal. Some licenses will be required to submit a final radiation survey report. However, many licensees will not, particularly licensees with sealed sources and byproduct licensees with small license possession limits and short half-life materials. Final radiation surveys would be similar to routine surveys that are conducted during operations. The extent of radiation surveys vary widely depending on the individual plant and site. The difficulty of conducting a radiation survey will depend, to a large degree, on the type(s) of radionuclides involved. It is estimated that less than one-half person-day will be required for most radiation surveys. Licensees must submit certification that residual radioactive contamination, which is attributable to activities conducted under the license, is not detectable from background radiation. Where significant residual radioactive contamination is detected, the licensee must submit a plan for decontamination, if required.

In cases where detectable contamination is present but is suitable for release a decontamination plan is not necessary. The complexity of decontamination plans may vary, depending on the type of nuclear facility involved, from a simple statement to a report that involves safety analyses. It is estimated that about 1 to 4 person-days of effort may be required in preparation of these submittals. Most data collection and evaluations can be done by personnel available to the licensee. Additional expenses could be incurred if special radiological analyses or special evaluations are necessary. The major benefit is that regulations that specify procedures for termination of licenses will be set forth. For most licensees the procedure would be simply a radiation survey and certification that there is no significant residual radioactive contamination.

As regards a licensee's responsibility for nuclear materials under a license extension, the rule primarily states a legal relationship that exists between the Commission and the licensee. It is essentially part of the licensee's responsibility under the license. It does not alter what is currently being done and does not add to or detract from the cost/benefit analysis.

4.1.1.4 Public. The procedures set forth in this rule will establish a permanent record demonstrating that public health and safety is protected.

4.1.2 Costs

4.1.2.1 NRC. The rule will codify NRC requirements for terminating licenses issued under 10 CFR Parts 30, 40, and 70. Some of these requirements are specified in the current regulations, but others are implemented on an individual-case-basis. Since no substantial requirements are added, no additional NRC staff resources are anticipated as a result of this action.

4.1.2.2 Other Government Agencies. This action will not affect other Federal agencies, unless they are NRC licensees. For Federal agencies licensed by NRC costs are similar to those analyses in Section 4.1.2.3 below.

4.1.2.3 Industry. The NRC believes that over 90% of the licensees affected; i.e., about 180 licensees per year, will be able to comply with the requirements by following the simple procedure. These licensees will (1) notify the Commission when the licensee decides to permanently discontinue activities conducted under the license, (2) terminate use of nuclear materials, (3) dispose of nuclear materials, (4) submit a completed Form NRC-314, and (5) certify that no residual radioactive contamination attributable to activities conducted under the license is detected. Preparation and submittal of the Form NRC-314 is estimated to require about an hour and a certification letter to require about the same. The total impact on a licensee under the simple procedure is estimated to be less than one-half person-day and to cost about \$80. NRC Form-314, as approved by the Office of Management and Budget, has been revised to contain provisions for certification, which will reduce this cost. Some licensees will also be required to submit a radiation survey report and possibly a decontamination plan. It is estimated that the impacts from submitting radiation survey reports will range from about one-half person-day at a cost of about \$80 for small licensees to about 2 person-days at a cost of about \$320 for large licensees. It is estimated that the impacts for submitting decontamination plans will range from about one-half person-day at a cost of about \$80 for small licensees to about 4 person-days at a cost of about \$640 for large licensees. The total cost to Industry is estimated to average between \$20,000 and \$25,000 per year.

4.1.2.4 Public. These estimated costs will be considered normal costs in doing business and will be recovered in the price of the commodities involved. However, the overall economic impact on the public as a result of this action is negligible.

4.2 Impacts on Other Requirements

This rule prescribes specific procedures for terminating a license issued under 10 CFR Parts 30, 40, and 70 and clarifies licensee responsibility for residual nuclear materials. It does not address broader decommissioning issues, such as decommissioning alternatives, timing, planning, financial assurance,

and residual radioactivity levels. These issues are being considered in separate rulemaking actions.

4.3 Constraints

There are no legal, institutional, or policy constraints on this action.

5. DECISION RATIONALE

At the present time, some NRC requirements for terminating a license are specified in the regulations, but others are implemented on an individual case basis. In particular, current regulations in 10 CFR Parts 30, 40, and 70 do not specifically address licensee responsibility for nuclear materials at the time of, or following, expiration of licenses or describe procedures for termination of licenses. In some cases licensees have failed to notify the Commission of their intent to terminate operations, allowed licenses to expire, and vacated premises before the staff had opportunity to inspect the premises for residual radioactive contamination. This situation has the potential for adverse affect on public health and safety.

An assessment of benefits and costs of the alternatives leads to the conclusion that these requirements are commensurate with the Commission's responsibility for public health and safety. No other alternatives are believed to be satisfactory, thus, this action is recommended.

6. IMPLEMENTATION

A notice on this final rule will be published in the Federal Register. The rule will become effective following a 30-day period. Since the rule does not add substantive requirements, no implementation problems are anticipated.

DRAFT CONGRESSIONAL LETTER

Dear Mr. Chairman:

Enclosed for the information of the Subcommittee on _____ is a copy of a Federal Register Notice that sets forth requirements for termination of byproduct, source, and special nuclear material licenses. This is a final rule. On October 26, 1982, the Commission published a proposed rule on the subject in the Federal Register (47 FR 47400). The notice provided a 60-day period for public comment. The Commission received 12 letters in response to the notice. Six letters were from electric power and utility companies (10 CFR Part 50 licensees), one from a nuclear fuel cycle licensee, three from consultant groups, and two from State and Federal agencies. Three comments specifically expressed support for the proposed rule and the remainder (18) suggested revisions, additions, and clarification. No comments specifically opposed the proposed rulemaking action. Copies of the comments may be examined in the Commission's Public Document Room at 1717 H Street, NW, Washington, D.C. The Federal Register Notice contains an analysis of comments received.

Existing regulations in 10 CFR Parts 30, 40, and 70 do not directly address termination of a licensee's responsibility for nuclear materials. These amendments clarify licensee responsibility for nuclear materials and set forth procedure for termination of specific licenses issued under 10 CFR Parts 30, 40, and 70. The amendments are mainly administrative in nature and do not add substantive requirements.

Sincerely,

Robert B. Minogue, Director
Office of Nuclear Regulatory Research

Enclosures: as stated

DAILY STAFF NOTES

OFFICE OF NUCLEAR REGULATORY RESEARCH

Final Rule to be Signed by EDO

On _____, 1983, the Executive Director for Operations approved a final rule which will amend 10 CFR Parts 30, 40, and 70. This rule will amend these parts to require, if a licensee decides to terminate a license, that (1) licensees terminate use of and dispose of nuclear materials, (2) licensees submit a form describing the disposal of nuclear materials, (3) licensees submit a final radiation survey report, unless the licensee can demonstrate the absence of residual radioactive contamination in some other manner, (4) licensees submit a plan for decontamination, if residual radioactive contamination is present above levels suitable for unrestricted release, (5) a license continues in effect beyond the license expiration date, if necessary, with respect to possession of residual radioactive contamination, (6) in cases where significant residual radioactive contamination is present, the licensee must control contaminated areas until decontamination is complete, and (7) a specific license will be terminated only on written notice from the Commission.

This notice constitutes notice to the Commission that, in accordance with the rulemaking authority delegated to EDO, the EDO has received this final rule and proposes to forward it on _____, 1983 to the Office of the Secretary for publication in the Federal Register unless otherwise directed by the Commission.

Enclosure D

GUIDELINES FOR DECONTAMINATION OF FACILITIES AND EQUIPMENT
PRIOR TO RELEASE FOR UNRESTRICTED USE
OR TERMINATION OF LICENSES FOR BYPRODUCT, SOURCE,
OR SPECIAL NUCLEAR MATERIAL

U. S. Nuclear Regulatory Commission
Division of Fuel Cycle and Material Safety
Washington, D.C. 20555

July 1982

ENCLOSURE 2

The instructions in this guide, in conjunction with Table 1, specify the radionuclides and radiation exposure rate limits which should be used in decontamination and survey of surfaces or premises and equipment prior to abandonment or release for unrestricted use. The limits in Table 1 do not apply to premises, equipment, or scrap containing induced radioactivity for which the radiological considerations pertinent to their use may be different. The release of such facilities or items from regulatory control is considered on a case-by-case basis.

1. The licensee shall make a reasonable effort to eliminate residual contamination.
2. Radioactivity on equipment or surfaces shall not be covered by paint, plating, or other covering material unless contamination levels, as determined by a survey and documented, are below the limits specified in Table 1 prior to the application of the covering. A reasonable effort must be made to minimize the contamination prior to use of any covering.
3. The radioactivity on the interior surfaces of pipes, drain lines, or ductwork shall be determined by making measurements at all traps, and other appropriate access points, provided that contamination at these locations is likely to be representative of contamination on the interior of the pipes, drain lines, or ductwork. Surfaces of premises, equipment, or scrap which are likely to be contaminated but are of such size, construction, or location as to make the surface inaccessible for purposes of measurement shall be presumed to be contaminated in excess of the limits.
4. Upon request, the Commission may authorize a licensee to relinquish possession or control of premises, equipment, or scrap having surfaces contaminated with materials in excess of the limits specified. This may include, but would not be limited to, special circumstances such as razing of buildings, transfer of premises to another organization continuing work with radioactive materials, or conversion of facilities to a long-term storage or standby status. Such requests must:
 - a. Provide detailed, specific information describing the premises, equipment or scrap, radioactive contaminants, and the nature, extent, and degree of residual surface contamination.
 - b. Provide a detailed health and safety analysis which reflects that the residual amounts of materials on surface areas, together with other considerations such as prospective use of the premises, equipment or scrap, are unlikely to result in an unreasonable risk to the health and safety of the public.

5. Prior to release of premises for unrestricted use, the licensee shall make a comprehensive radiation survey which establishes that contamination is within the limits specified in Table 1. A copy of the survey report shall be filed with the Division of Fuel Cycle and Material Safety, USNRC, Washington, D.C. 20555, and also the Administrator of the NRC Regional Office having jurisdiction. The report should be filed at least 30 days prior to the planned date of abandonment. The survey report shall:

- a. Identify the premises.
- b. Show that reasonable effort has been made to eliminate residual contamination.
- c. Describe the scope of the survey and general procedures followed.
- d. State the findings of the survey in units specified in the instruction.

Following review of the report, the NRC will consider visiting the facilities to confirm the survey.

TABLE 1

ACCEPTABLE SURFACE CONTAMINATION LEVELS

NUCLIDES ^a	AVERAGE ^{b c f}	MAXIMUM ^{b d f}	REMOVABLE ^{b e f}
U-nat, U-235, U-238, and associated decay products	5,000 dpm α /100 cm ²	15,000 dpm α /100 cm ²	1,000 dpm α /100 cm ²
Transuranics, Ra-226, Ra-228, Th-230, Th-228, Pa-231, Ac-227, I-125, I-129	100 dpm/100 cm ²	300 dpm/100 cm ²	20 dpm/100 cm ²
Th-nat, Th-232, Sr-90, Ra-223, Ra-224, U-232, I-126, I-131, I-133	1000 dpm/100 cm ²	3000 dpm/100 cm ²	200 dpm/100 cm ²
Beta-gamma emitters (nuclides with decay modes other than alpha emission or spontaneous fission) except Sr-90 and others noted above.	5000 dpm $\beta\gamma$ /100 cm ²	15,000 dpm $\beta\gamma$ /100 cm ²	1000 dpm $\beta\gamma$ /100 cm ²

^aWhere surface contamination by both alpha- and beta-gamma-emitting nuclides exists, the limits established for alpha- and beta-gamma-emitting nuclides should apply independently.

^bAs used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.

^cMeasurements of average contaminant should not be averaged over more than 1 square meter. For objects of less surface area, the average should be derived for each such object.

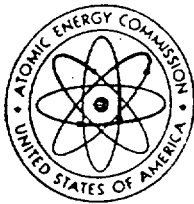
^dThe maximum contamination level applies to an area of not more than 100 cm².

^eThe amount of removable radioactive material per 100 cm² of surface area should be determined by wiping that area with dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionally and the entire surface should be wiped.

^fThe average and maximum radiation levels associated with surface contamination resulting from beta-gamma emitters should not exceed 0.2 mrad/hr at 1 cm and 1.0 mrad/hr at 1 cm, respectively, measured through not more than 7 milligrams per square centimeter of total absorber.

Acceptable Soil Contamination Levels

<u>Kind of Material</u>	<u>Soil Concentration Level for unrestricted area</u>
i) Natural Uranium (U-238 + U-234) with daughters present and in equilibrium	10 (pCi/gm of soil)
ii) Depleted Uranium or Natural Uranium that has been separated from its daughters Soluble or Insoluble	35 (pCi/gm of soil)
iii) Natural Thorium (Th-232 + Th-228) with daughters present and in equilibrium	10 (pCi/gm of soil)
iv) Enriched Uranium Soluble or Insoluble	30 (pCi/gm of soil)
v) Plutonium (Y) or (W) compounds	25 (pCi/gm of soil)
vi) Am-241 (W) compounds	30 (pCi/gm of soil)
vii) All Byproduct Material	Soil concentrations shall be determined on a case by case basis
viii) External Radiation	10 microrentgens/hr above background measured at one meter from the ground surface



U.S. ATOMIC ENERGY COMMISSION

June 1974

REGULATORY GUIDE

DIRECTORATE OF REGULATORY STANDARDS

REGULATORY GUIDE 1.86

TERMINATION OF OPERATING LICENSES FOR NUCLEAR REACTORS

A. INTRODUCTION

Section 50.51, "Duration of license, renewal," of 10 CFR Part 50, "Licensing of Production and Utilization Facilities," requires that each license to operate a production and utilization facility be issued for a specified duration. Upon expiration of the specified period, the license may be either renewed or terminated by the Commission. Section 50.82, "Applications for termination of licenses," specifies the requirements that must be satisfied to terminate an operating license, including the requirement that the dismantlement of the facility and disposal of the component parts not be inimical to the common defense and security or to the health and safety of the public. This guide describes methods and procedures considered acceptable by the Regulatory staff for the termination of operating licenses for nuclear reactors. The Advisory Committee on Reactor Safeguards has been consulted concerning this guide and has concurred in the regulatory position.

B. DISCUSSION

When a licensee decides to terminate his nuclear reactor operating license, he may, as a first step in the process, request that his operating license be amended to restrict him to possess but not operate the facility. The advantage to the licensee of converting to such a possession-only license is reduced surveillance requirements in that periodic surveillance of equipment important to the safety of reactor operation is no longer required. Once this possession-only license is issued, reactor operation is not permitted. Other activities related to cessation of operations such as unloading fuel from the reactor and placing it in storage (either onsite or offsite) may be continued.

A licensee having a possession-only license must retain, with the Part 50 license, authorization for special nuclear material (10 CFR Part 70, "Special Nuclear Material"), byproduct material (10 CFR Part 30, "Rules of General Applicability to Licensing of Byproduct Material"), and source material (10 CFR Part 40, "Licensing of Source Material"), until the fuel, radioactive components, and sources are removed from the facility. Appropriate administrative controls and facility requirements are imposed by the Part 50 license and the technical specifications to assure that proper surveillance is performed and that the reactor facility is maintained in a safe condition and not operated.

A possession-only license permits various options and procedures for decommissioning, such as mothballing, entombment, or dismantling. The requirements imposed depend on the option selected.

Section 50.82 provides that the licensee may dismantle and dispose of the component parts of a nuclear reactor in accordance with existing regulations. For research reactors and critical facilities, this has usually meant the disassembly of a reactor and its shipment offsite, sometimes to another appropriately licensed organization for further use. The site from which a reactor has been removed must be decontaminated, as necessary, and inspected by the Commission to determine whether unrestricted access can be approved. In the case of nuclear power reactors, dismantling has usually been accomplished by shipping fuel offsite, making the reactor inoperable, and disposing of some of the radioactive components.

Radioactive components may be either shipped off-site for burial at an authorized burial ground or secured

USAEC REGULATORY GUIDES

Regulatory Guides are issued to describe and make available to the public methods acceptable to the AEC Regulatory staff of implementing specific parts of the Commission's regulations, to delineate techniques used by the staff in evaluating specific problems or postulated accidents, or to provide guidance to applicants. Regulatory Guides are not substitutes for regulations and compliance with them is not required. Methods and solutions different from those set out in the guides will be acceptable if they provide a basis for the findings requisite to the issuance or continuance of a permit or license by the Commission.

Published guides will be revised periodically, as appropriate, to accommodate comments and to reflect new information or experience.

Copies of published guides may be obtained by request indicating the divisions desired to the U.S. Atomic Energy Commission, Washington, D.C. 20545, Attention: Director of Regulatory Standards. Comments and suggestions for improvements in these guides are encouraged and should be sent to the Secretary of the Commission, U.S. Atomic Energy Commission, Washington, D.C. 20545, Attention: Chief, Public Proceedings Staff.

The guides are issued in the following ten broad divisions:

- | | |
|-----------------------------------|------------------------|
| 1. Power Reactors | 6. Products |
| 2. Research and Test Reactors | 7. Transportation |
| 3. Fuels and Materials Facilities | 8. Occupational Health |
| 4. Environmental and Siting | 9. Antitrust Review |
| 5. Materials and Plant Protection | 10. General |

on the site. Those radioactive materials remaining on the site must be isolated from the public by physical barriers or other means to prevent public access to hazardous levels of radiation. Surveillance is necessary to assure the long term integrity of the barriers. The amount of surveillance required depends upon (1) the potential hazard to the health and safety of the public from radioactive material remaining on the site and (2) the integrity of the physical barriers. Before areas may be released for unrestricted use, they must have been decontaminated or the radioactivity must have decayed to less than prescribed limits (Table I).

The hazard associated with the retired facility is evaluated by considering the amount and type of remaining contamination, the degree of confinement of the remaining radioactive materials, the physical security provided by the confinement, the susceptibility to release of radiation as a result of natural phenomena, and the duration of required surveillance.

C. REGULATORY POSITION

1. APPLICATION FOR A LICENSE TO POSSESS BUT NOT OPERATE (POSSESSION-ONLY LICENSE)

A request to amend an operating license to a possession-only license should be made to the Director of Licensing, U.S. Atomic Energy Commission, Washington, D.C. 20545. The request should include the following information:

- a. A description of the current status of the facility.
- b. A description of measures that will be taken to prevent criticality or reactivity changes and to minimize releases of radioactivity from the facility.
- c. Any proposed changes to the technical specifications that reflect the possession-only facility status and the necessary disassembly/retirement activities to be performed.
- d. A safety analysis of both the activities to be accomplished and the proposed changes to the technical specifications.
- e. An inventory of activated materials and their location in the facility.

2. ALTERNATIVES FOR REACTOR RETIREMENT

Four alternatives for retirement of nuclear reactor facilities are considered acceptable by the Regulatory staff. These are:

a. **Mothballing.** Mothballing of a nuclear reactor facility consists of putting the facility in a state of protective storage. In general, the facility may be left intact except that all fuel assemblies and the radioactive

fluids and waste should be removed from the site. Adequate radiation monitoring, environmental surveillance, and appropriate security procedures should be established under a possession-only license to ensure that the health and safety of the public is not endangered.

b. **In-Place Entombment.** In-place entombment consists of sealing all the remaining highly radioactive or contaminated components (e.g., the pressure vessel and reactor internals) within a structure integral with the biological shield after having all fuel assemblies, radioactive fluids and wastes, and certain selected components shipped offsite. The structure should provide integrity over the period of time in which significant quantities (greater than Table I levels) of radioactivity remain with the material in the entombment. An appropriate and continuing surveillance program should be established under a possession-only license.

c. **Removal of Radioactive Components and Dismantling.** All fuel assemblies, radioactive fluids and waste, and other materials having activities above accepted unrestricted activity levels (Table I) should be removed from the site. The facility owner may then have unrestricted use of the site with no requirement for a license. If the facility owner so desires, the remainder of the reactor facility may be dismantled and all vestiges removed and disposed of.

d. **Conversion to a New Nuclear System or a Fossil Fuel System.** This alternative, which applies only to nuclear power plants, utilizes the existing turbine system with a new steam supply system. The original nuclear steam supply system should be separated from the electric generating system and disposed of in accordance with one of the previous three retirement alternatives.

3. SURVEILLANCE AND SECURITY FOR THE RETIREMENT ALTERNATIVES WHOSE FINAL STATUS REQUIRES A POSSESSION-ONLY LICENSE

A facility which has been licensed under a possession-only license may contain a significant amount of radioactivity in the form of activated and contaminated hardware and structural materials. Surveillance and commensurate security should be provided to assure that the public health and safety are not endangered.

a. Physical security to prevent inadvertent exposure of personnel should be provided by multiple locked barriers. The presence of these barriers should make it extremely difficult for an unauthorized person to gain access to areas where radiation or contamination levels exceed those specified in Regulatory Position C.4. To prevent inadvertent exposure, radiation areas above 5 mR/hr, such as near the activated primary system of a power plant, should be appropriately marked and should not be accessible except by cutting of welded closures or the disassembly and removal of substantial structures

and/or shielding material. Means such as a remote-readout intrusion alarm system should be provided to indicate to designated personnel when a physical barrier is penetrated. Security personnel that provide access control to the facility may be used instead of the physical barriers and the intrusion alarm systems.

b. The physical barriers to unauthorized entrance into the facility, e.g., fences, buildings, welded doors, and access openings, should be inspected at least quarterly to assure that these barriers have not deteriorated and that locks and locking apparatus are intact.

c. A facility radiation survey should be performed at least quarterly to verify that no radioactive material is escaping or being transported through the containment barriers in the facility. Sampling should be done along the most probable path by which radioactive material such as that stored in the inner containment regions could be transported to the outer regions of the facility and ultimately to the environs.

d. An environmental radiation survey should be performed at least semiannually to verify that no significant amounts of radiation have been released to the environment from the facility. Samples such as soil, vegetation, and water should be taken at locations for which statistical data has been established during reactor operations.

e. A site representative should be designated to be responsible for controlling authorized access into and movement within the facility.

f. Administrative procedures should be established for the notification and reporting of abnormal occurrences such as (1) the entrance of an unauthorized person or persons into the facility and (2) a significant change in the radiation or contamination levels in the facility or the offsite environment.

g. The following reports should be made:

(1) An annual report to the Director of Licensing, U.S. Atomic Energy Commission, Washington, D.C. 20545, describing the results of the environmental and facility radiation surveys, the status of the facility, and an evaluation of the performance of security and surveillance measures.

(2) An abnormal occurrence report to the Regulatory Operations Regional Office by telephone within 24 hours of discovery of an abnormal occurrence. The abnormal occurrence will also be reported in the annual report described in the preceding item.

h. Records or logs relative to the following items should be kept and retained until the license is terminated, after which they may be stored with other plant records:

- (1) Environmental surveys,
- (2) Facility radiation surveys,
- (3) Inspections of the physical barriers, and
- (4) Abnormal occurrences.

4. DECONTAMINATION FOR RELEASE FOR UNRESTRICTED USE

If it is desired to terminate a license and to eliminate any further surveillance requirements, the facility should be sufficiently decontaminated to prevent risk to the public health and safety. After the decontamination is satisfactorily accomplished and the site inspected by the Commission, the Commission may authorize the license to be terminated and the facility abandoned or released for unrestricted use. The licensee should perform the decontamination using the following guidelines:

a. The licensee should make a reasonable effort to eliminate residual contamination.

b. No covering should be applied to radioactive surfaces of equipment or structures by paint, plating, or other covering material until it is known that contamination levels (determined by a survey and documented) are below the limits specified in Table I. In addition, a reasonable effort should be made (and documented) to further minimize contamination prior to any such covering.

c. The radioactivity of the interior surfaces of pipes, drain lines, or ductwork should be determined by making measurements at all traps and other appropriate access points, provided contamination at these locations is likely to be representative of contamination on the interior of the pipes, drain lines, or ductwork. Surfaces of premises, equipment, or scrap which are likely to be contaminated but are of such size, construction, or location as to make the surface inaccessible for purposes of measurement should be assumed to be contaminated in excess of the permissible radiation limits.

d. Upon request, the Commission may authorize a licensee to relinquish possession or control of premises, equipment, or scrap having surfaces contaminated in excess of the limits specified. This may include, but is not limited to, special circumstances such as the transfer of premises to another licensed organization that will continue to work with radioactive materials. Requests for such authorization should provide:

(1) Detailed, specific information describing the premises, equipment, scrap, and radioactive contaminants and the nature, extent, and degree of residual surface contamination.

(2) A detailed health and safety analysis indicating that the residual amounts of materials on surface areas, together with other considerations such as the prospective use of the premises, equipment, or scrap, are unlikely to result in an unreasonable risk to the health and safety of the public.

e. Prior to release of the premises for unrestricted use, the licensee should make a comprehensive radiation survey establishing that contamination is within the limits specified in Table I. A survey report should be filed with the Director of Licensing, U.S. Atomic Energy Commission, Washington, D.C. 20545, with a copy to the Director of the Regulatory Operations Regional Office having jurisdiction. The report should be filed at least 30 days prior to the planned date of abandonment. The survey report should:

- (1) Identify the premises;
- (2) Show that reasonable effort has been made to reduce residual contamination to as low as practicable levels;
- (3) Describe the scope of the survey and the general procedures followed; and
- (4) State the finding of the survey in units specified in Table I.

After review of the report, the Commission may inspect the facilities to confirm the survey prior to granting approval for abandonment.

5. REACTOR RETIREMENT PROCEDURES

As indicated in Regulatory Position C.2, several alternatives are acceptable for reactor facility retirement. If minor disassembly or "mothballing" is planned, this could be done by the existing operating and maintenance procedures under the license in effect. Any planned actions involving an unreviewed safety question

or a change in the technical specifications should be reviewed and approved in accordance with the requirements of 10 CFR §50.59.

If major structural changes to radioactive components of the facility are planned, such as removal of the pressure vessel or major components of the primary system, a dismantlement plan including the information required by §50.82 should be submitted to the Commission. A dismantlement plan should be submitted for all the alternatives of Regulatory Position C.2 except mothballing. However, minor disassembly activities may still be performed in the absence of such a plan, provided they are permitted by existing operating and maintenance procedures. A dismantlement plan should include the following:

- a. A description of the ultimate status of the facility
- b. A description of the dismantling activities and the precautions to be taken.
- c. A safety analysis of the dismantling activities including any effluents which may be released.
- d. A safety analysis of the facility in its ultimate status.

Upon satisfactory review and approval of the dismantling plan, a dismantling order is issued by the Commission in accordance with §50.82. When dismantling is completed and the Commission has been notified by letter, the appropriate Regulatory Operations Regional Office inspects the facility and verifies completion in accordance with the dismantlement plan. If residual radiation levels do not exceed the values in Table I, the Commission may terminate the license. If these levels are exceeded, the licensee retains the possession-only license under which the dismantling activities have been conducted or, as an alternative, may make application to the State (if an Agreement State) for a byproduct materials license.

TABLE I

ACCEPTABLE SURFACE CONTAMINATION LEVELS

NUCLIDE ^a	AVERAGE ^{b c}	MAXIMUM ^{b d}	REMOVABLE ^{b e}
U-nat, U-235, U-238, and associated decay products	5,000 dpm α /100 cm ²	15,000 dpm α /100 cm ²	1,000 dpm α /100 cm ²
Transuranics, Ra-226, Ra-228, Th-230, Th-228, Pa-231, Ac-227, I-125, I-129	100 dpm/100 cm ²	300 dpm/100 cm ²	20 dpm/100 cm ²
Th-nat, Th-232, Sr-90, Ra-223, Ra-224, U-232, I-126, I-131, I-133	1000 dpm/100 cm ²	3000 dpm/100 cm ²	200 dpm/100 cm ²
Beta-gamma emitters (nuclides with decay modes other than alpha emission or spontaneous fission) except Sr-90 and others noted above.	5000 dpm β - γ /100 cm ²	15,000 dpm β - γ /100 cm ²	1000 dpm β - γ /100 cm ²

^aWhere surface contamination by both alpha- and beta-gamma-emitting nuclides exists, the limits established for alpha- and beta-gamma-emitting nuclides should apply independently.

^bAs used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.

^cMeasurements of average contaminant should not be averaged over more than 1 square meter. For objects of less surface area, the average should be derived for each such object.

^dThe maximum contamination level applies to an area of not more than 100 cm².

^eThe amount of removable radioactive material per 100 cm² of surface area should be determined by wiping that area with dry filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionally and the entire surface should be wiped.